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AUTHOR Beatty, Leslie; And Others
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ABSTRACT

This is an SMSG elementary school text for second-grade students. The development of mathematical ideas in the text is grounded in appropriate experiences with things from the physical world and the immediate environment. Chapter topics include: (1) sets and numbers; (2) addition and subtraction; (3) sets of points; (4) linear measurement; (5) computing sums and differences; (6) congruence of angles and triangles; (7) arrays and multiplication; and (8) division and rational numbers. (MP)

STUDENT'S TEXT

UNIT NO. 54

MATHEMATICS FOR THE ELEMENTARY SCHOOL

BOOK 2

SCHOOL MATHEMATICS STUDY GROUP

YALE UNIVERSITY PRESS

Mathematics for the Elementary School

Book 2

Student's Text

REVISED EDITION

Prepared under the supervision of the
Panel on Elementary School Mathematics
of the School Mathematics Study Group:

Leslie Beatty	Chula Vista City School District, Chula Vista, California
E. Glenadine Gibb	State College of Iowa
William T. Guy	University of Texas
Stanley B. Jackson	University of Maryland
Irene Sauble	Detroit Public Schools
Marshall H. Stone	University of Chicago
J. Fred Weaver	Boston University
Raymond L. Wilder	University of Michigan

New Haven and London, Yale University Press, 1965

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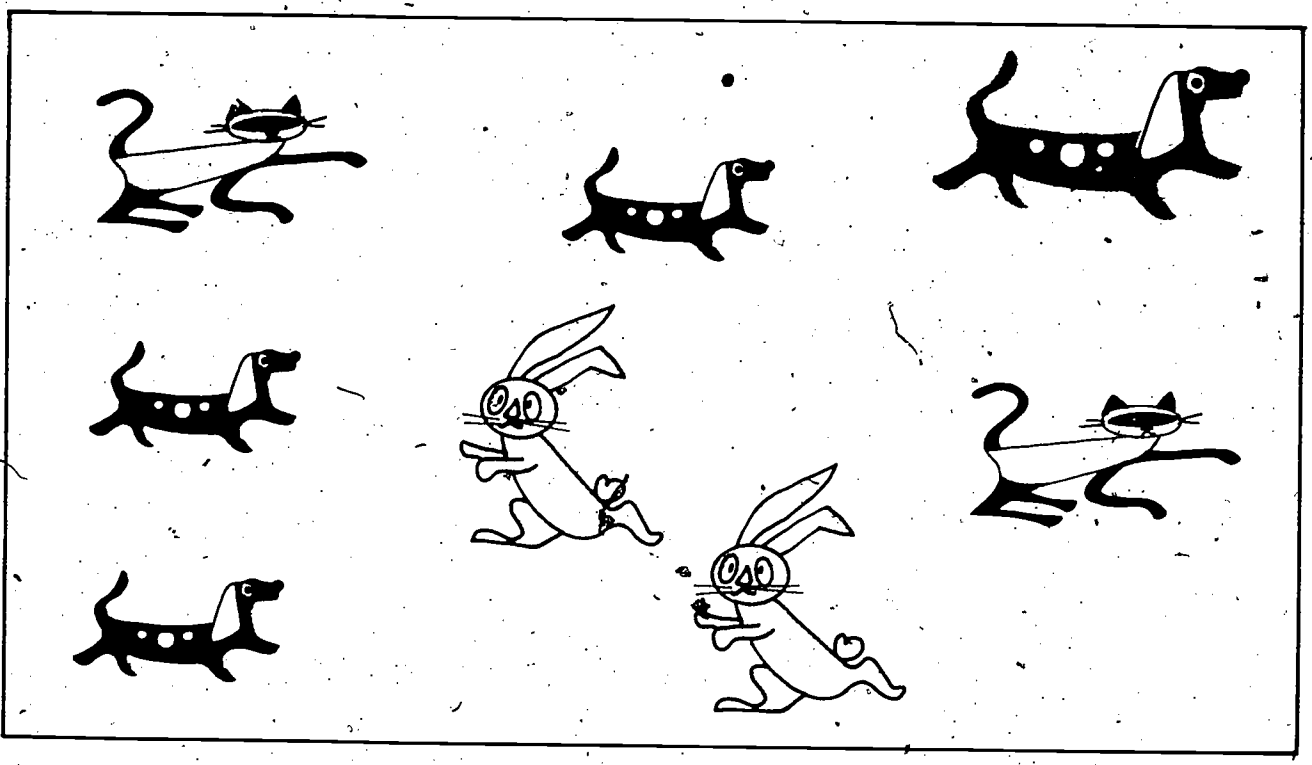
Contents



SETS AND SUBSETS

This is a set of animals.

This is a set of pets.

This is a set of cats, dogs, and rabbits.

This set of animals has _____ members.

This set has many subsets.

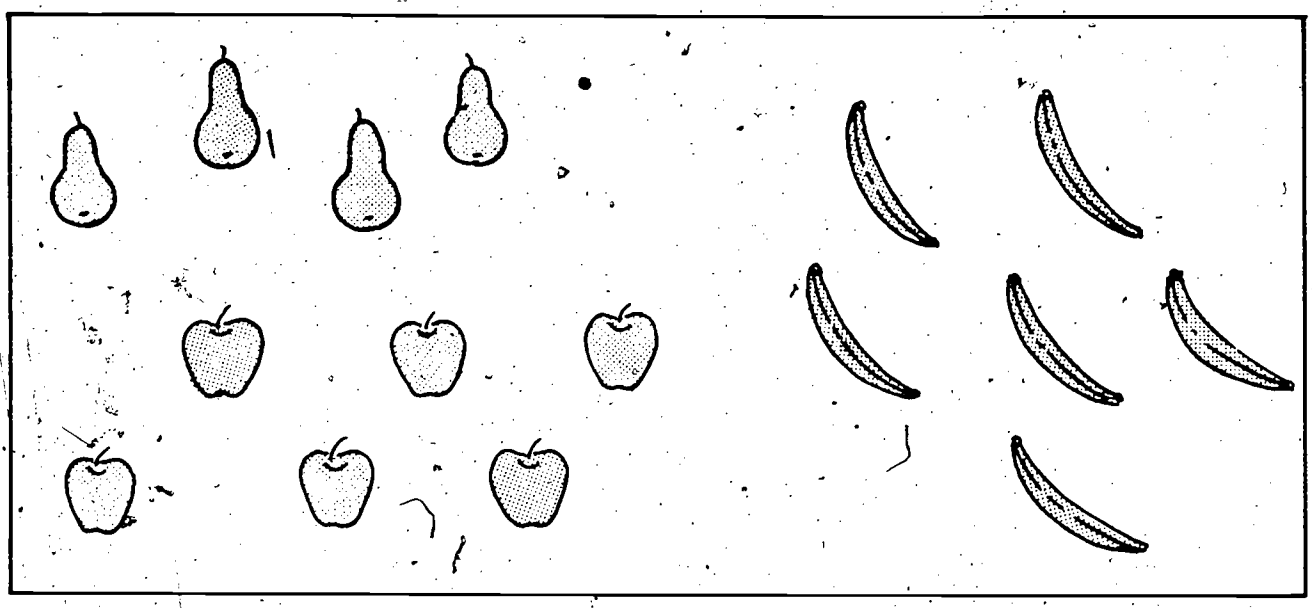
The subset of dogs has _____ members.

The subset of cats has _____ members.

The subset of rabbits has _____ members.

The subset of houses has _____ members.

The subset of animals has _____ members.



This is a set of fruit. It has many subsets.

Draw a red ring around the subset of  's.

The subset of  's has _____ members.

Draw a blue ring around the subset of  's.

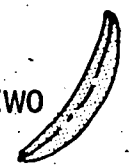
The subset of  's has _____ members.

Draw a yellow ring around the subset of  's.

The subset of  's has _____ members.

Draw a green ring around a subset of two  's and three  's.

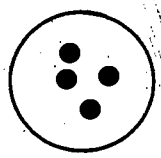
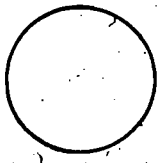
This subset has _____ members.

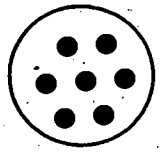
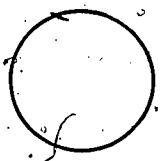
Draw a brown ring around a subset of one  , one  and two  's.

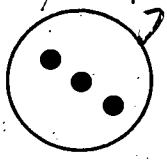
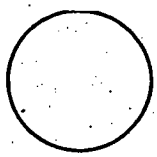
This subset has _____ members.

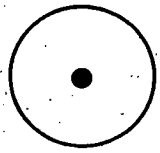
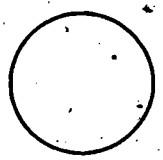
Comparing Sets

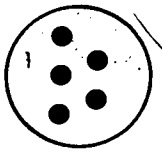
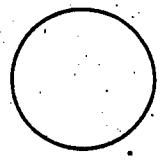
Show a set with as many members. Use X's.

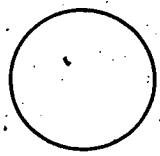
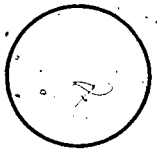
 has just as many members as 

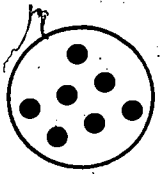
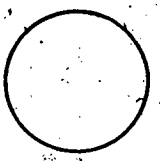
 has just as many members as 

 has just as many members as 

 has just as many members as 

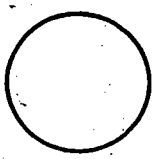
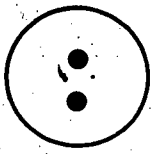
 has just as many members as 

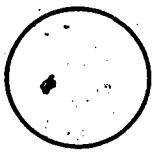
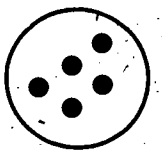
 has just as many members as 

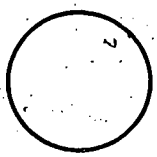
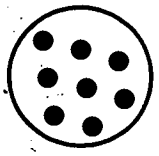
 has just as many members as 

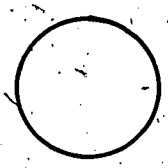
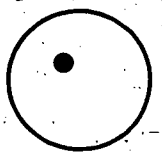
Comparing Sets

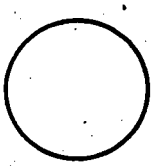
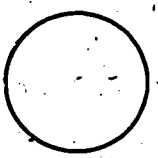
Show a set with more members. Use X's.

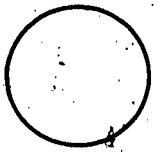
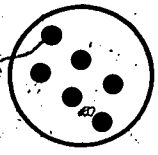
 has more members than 

 has more members than 

 has more members than 

 has more members than 

 has more members than 

 has more members than 

Comparing Sets

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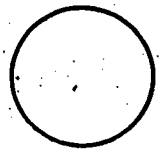
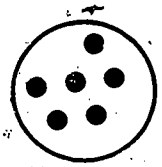
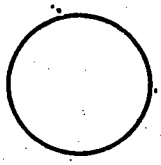
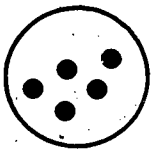
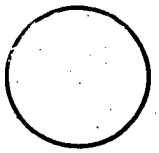
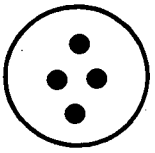
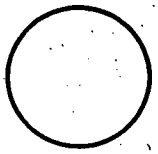
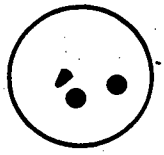
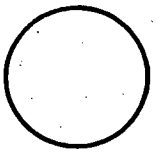
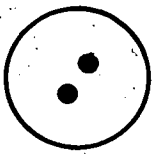
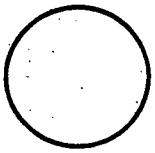
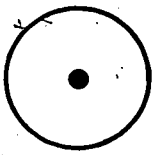
 has fewer members than 

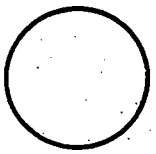
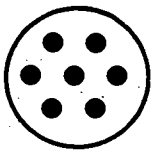
 has fewer members than 

 has fewer members than 

 has fewer members than 

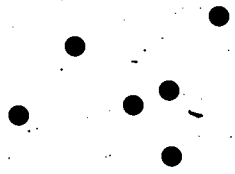
 has fewer members than 

 has fewer members than 

 has fewer members than 

★Comparing Sets

Show a set with one more member. Use X's.

	has one fewer member than	
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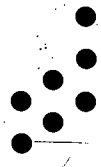
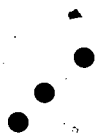
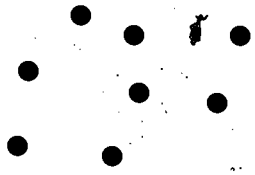
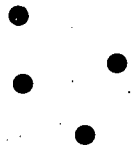
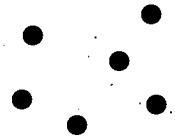
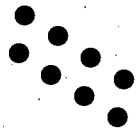
	has one fewer member than	
	has one fewer member than	
	has one fewer member than	
	has one fewer member than	

★Comparing Sets

Use X's. Show a set with one fewer member.

	has one more member than	
	has one more member than	
	has one more member than	
	has one more member than	
	has one more member than	
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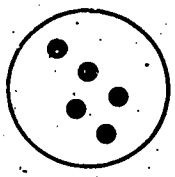
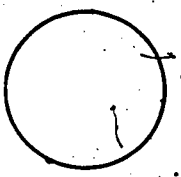
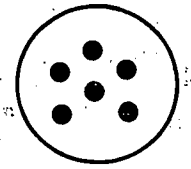
★Comparing Sets

Use X's to show sets.



has one more member than





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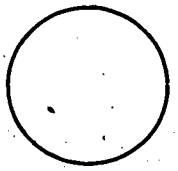
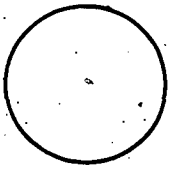
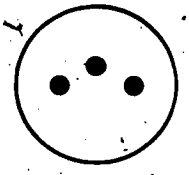
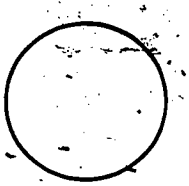


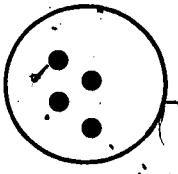
has one more member than



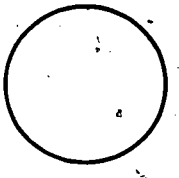


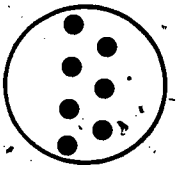
has one fewer member than



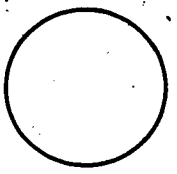


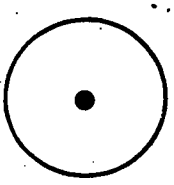
has one fewer member than



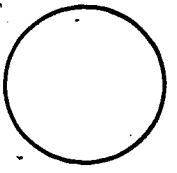


has as many members as

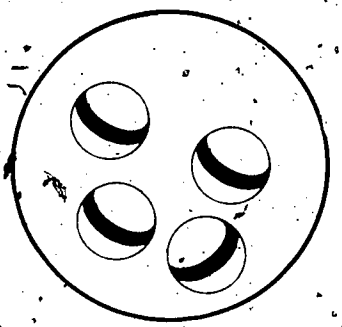




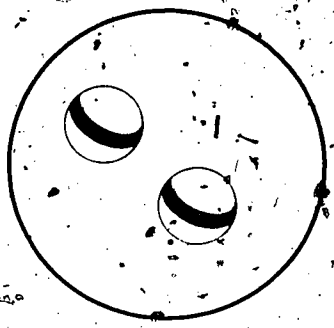
has one fewer member than



Joining Sets and Adding Numbers



This set has ____ members.



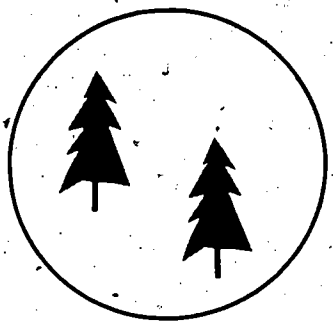
This set has ____ members.

Think about the union of these sets.

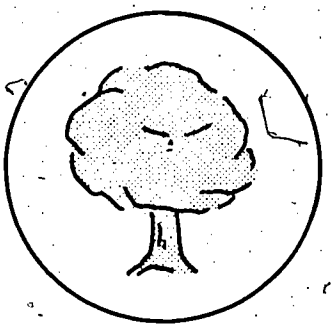
It would have _____ members.

4 + 2 = _____

2 + 4 = _____



_____ members



_____ member

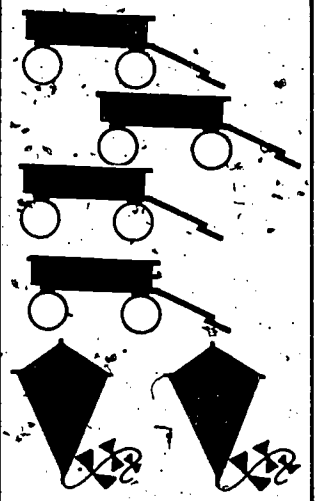
Think about the union of these sets.

It would have _____ members.

2 + 1 = _____

1 + 2 = _____

Joining Sets and Adding Numbers

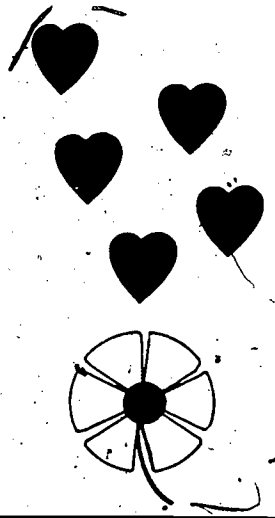


2 + 4 = _____

4 + 2 = _____

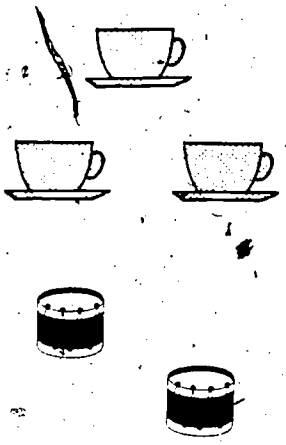
1 + 4 = _____

4 + 1 = _____



5 + ___ = ___

1 + ___ = ___



3 + ___ = ___

2 + ___ = ___

1 + ___ = ___

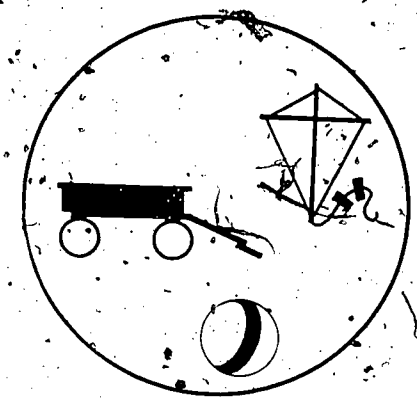
3 + ___ = ___

6 + ___ = ___

0 + ___ = ___

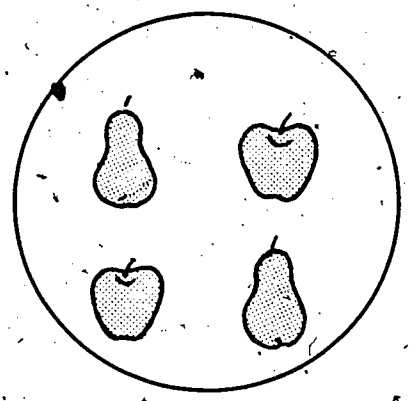
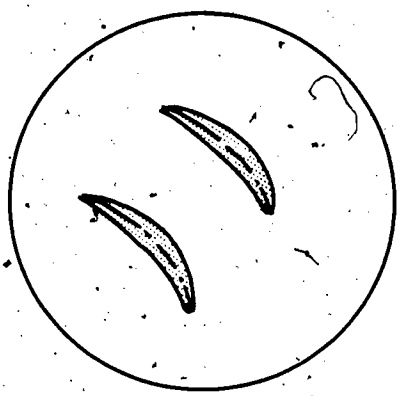
Joining Sets and Adding Numbers

Write equations for each of these.

Join  and 

Equations: _____

_____

Join  and 

Equations: _____

_____

Adding Numbers

Fill the blanks.

5 + 1 = _____

1 + 4 = _____

6 + 0 = _____

3 + 2 = _____

1 + 2 = _____

4 + 1 = _____

0 + 2 = _____

5 + 0 = _____

1 + 5 = _____

2 + 3 = _____

1 + 1 = _____

2 + 2 = _____

3 + 3 = _____

4 + 0 = _____

0 + 3 = _____

2 + 4 = _____

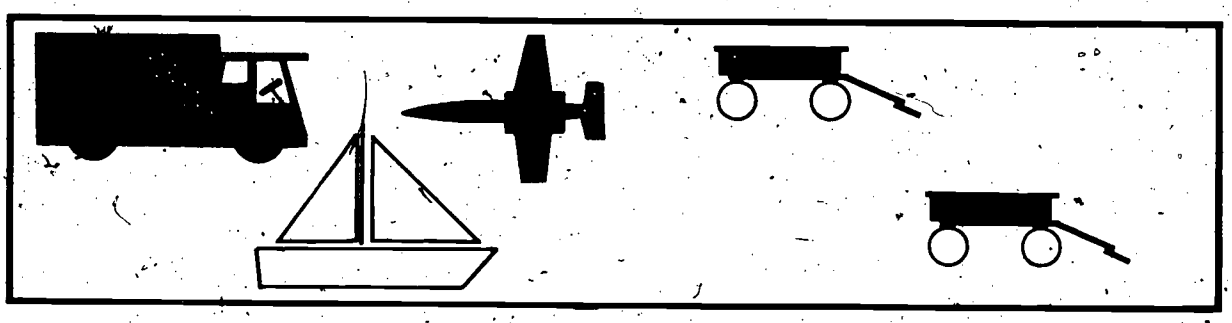
3 + 1 = _____

2 + 1 = _____

0 + 6 = _____

3 + 0 = _____

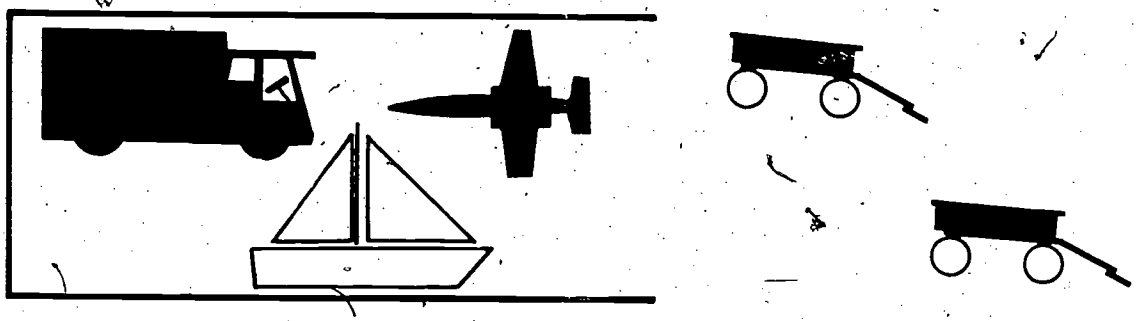
Removing Sets and Subtracting Numbers



Here is a picture of a set of toys.

It has _____ members.

Think of removing a set of 2 wagons.



These pictures will help us think about the remaining set.

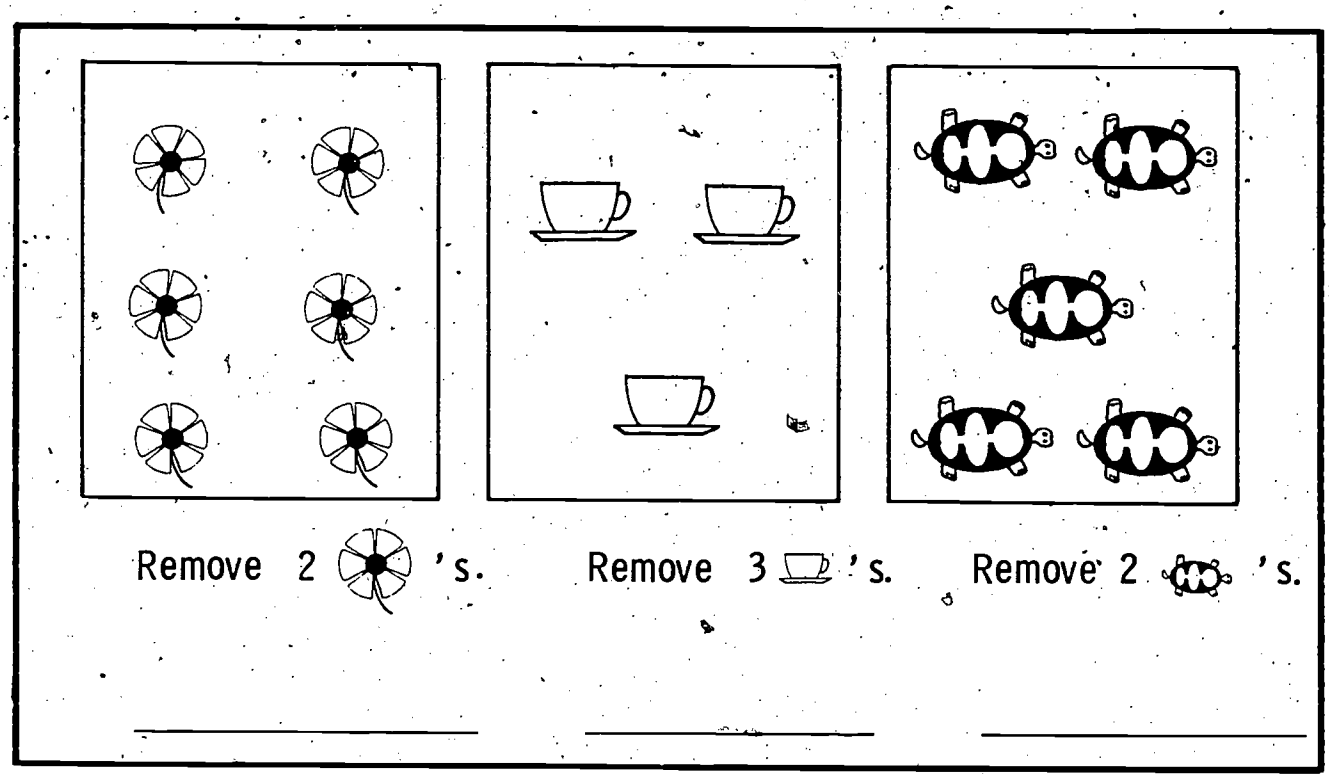
The remaining set has _____ members.

We may write this equation: _____.

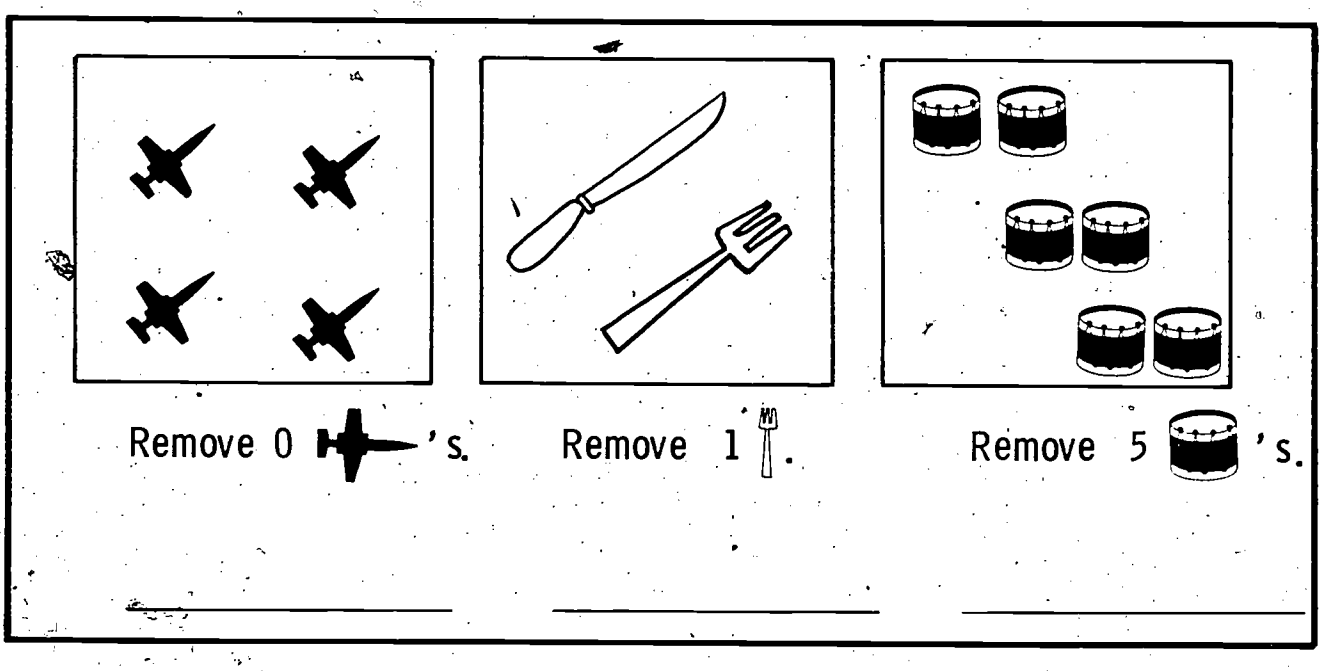
Removing Sets and Subtracting Numbers

Draw a ring around the set you think of removing.

Write an equation for each picture.



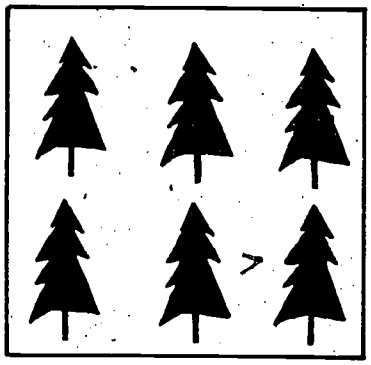
Remove 2 's. Remove 3 's. Remove 2 's.



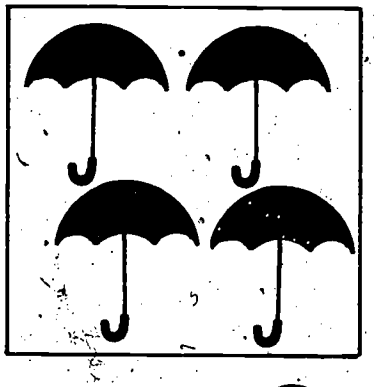
Remove 0 's. Remove 1 . Remove 5 's.

Draw a ring around the set you think of removing.

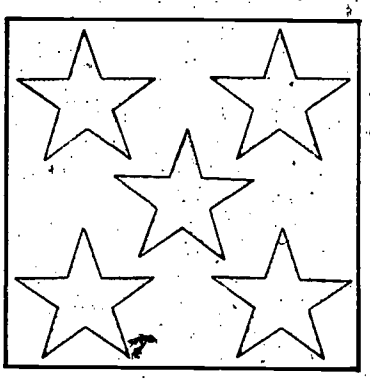
Write an equation for each picture.



Remove 3  's.

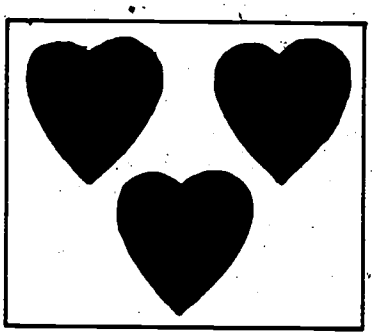


Remove 2  's.

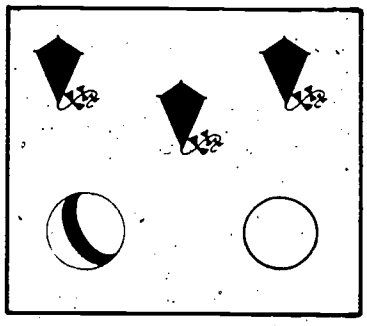


Remove 1  .

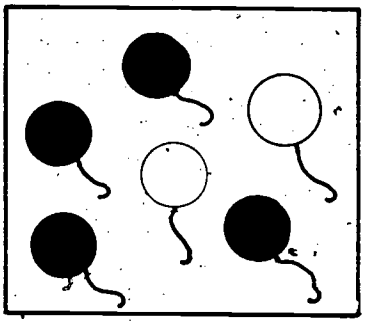
_____ _____ _____



Remove 2  's.



Remove 3  's.



Remove 4  's.

_____ _____ _____

Removing Sets and Subtracting Numbers

Complete the chart.

Number of starting set	Number of set removed	Number of remaining set	Equation
6	4	2	6 - 4 = 2
5	1		
3	3		
3	0		
4		3	
			5 - 3 = 2
	4	1	
2		0	

Fill in the blanks:

6 - 6 = _____ 4 + 2 = _____ 3 - _____ = 1

5 - 1 = _____ 1 + 5 = _____ 2 + _____ = 2

2 + 4 = _____ 6 + 0 = _____ 2 - _____ = 2

Doing and Undoing

Fill the blanks.

4 + 2 = 6 6 - 2 = 4	3 + 1 = _____ ___ - ___ = 3	6 + 0 = _____ ___ - ___ = 6
1 + 5 = _____ ___ - ___ = 1	2 + 2 = _____ ___ - ___ = 2	1 + 3 = _____ ___ - ___ = 1
3 + 2 = _____ ___ - ___ = 3	4 + 1 = _____ ___ - ___ = 4	3 + 3 = _____ ___ - ___ = 3
0 + 5 = _____ ___ - ___ = 0	1 + 2 = _____ ___ - ___ = 1	2 + 4 = _____ ___ - ___ = 2
5 + 1 = _____ ___ - ___ = 5	2 + 1 = _____ ___ - ___ = 2	4 + 0 = _____ ___ - ___ = 4

Adding and Undoing

Finish each set of equations.

6 + 3 = ____	3 + 6 = ____

2 + 8 = ____	8 + 2 = ____

1 + 7 = ____	7 + 1 = ____

4 + 3 = ____	3 + 4 = ____

7 + 2 = ____	

5 + 5 = ____	

8 + 0 = ____	

4 + 1 = ____	

Doing and Undoing

Fill the blanks.

5 - I = 4 4 + 1 = 5	6 - 0 = _____ ___ + ___ = 6	3 - 2 = _____ ___ + ___ = 3
6 - 5 = _____ ___ + ___ = 6	4 - 2 = _____ ___ + ___ = 4	4 - 3 = _____ ___ + ___ = 4
5 - 2 = _____ ___ + ___ = 5	6 - 3 = _____ ___ + ___ = 6	5 - 0 = _____ ___ + ___ = 5
6 - 5 = _____ ___ + ___ = 6	3 - 1 = _____ ___ + ___ = 3	4 - 4 = _____ ___ + ___ = 4
5 - 3 = _____ ___ + ___ = 5	6 - 4 = _____ ___ + ___ = 6	6 - 2 = _____ ___ + ___ = 6

Subtracting and Undoing

Finish each set of equations.

9 - 5 = ____	9 - 4 = ____

10 - 7 = ____	10 - 3 = ____

7 - 2 = ____	7 - 5 = ____

10 - 4 = ____	10 - 6 = ____

9 - 8 = ____	

8 - 4 = ____	

6 - 0 = ____	

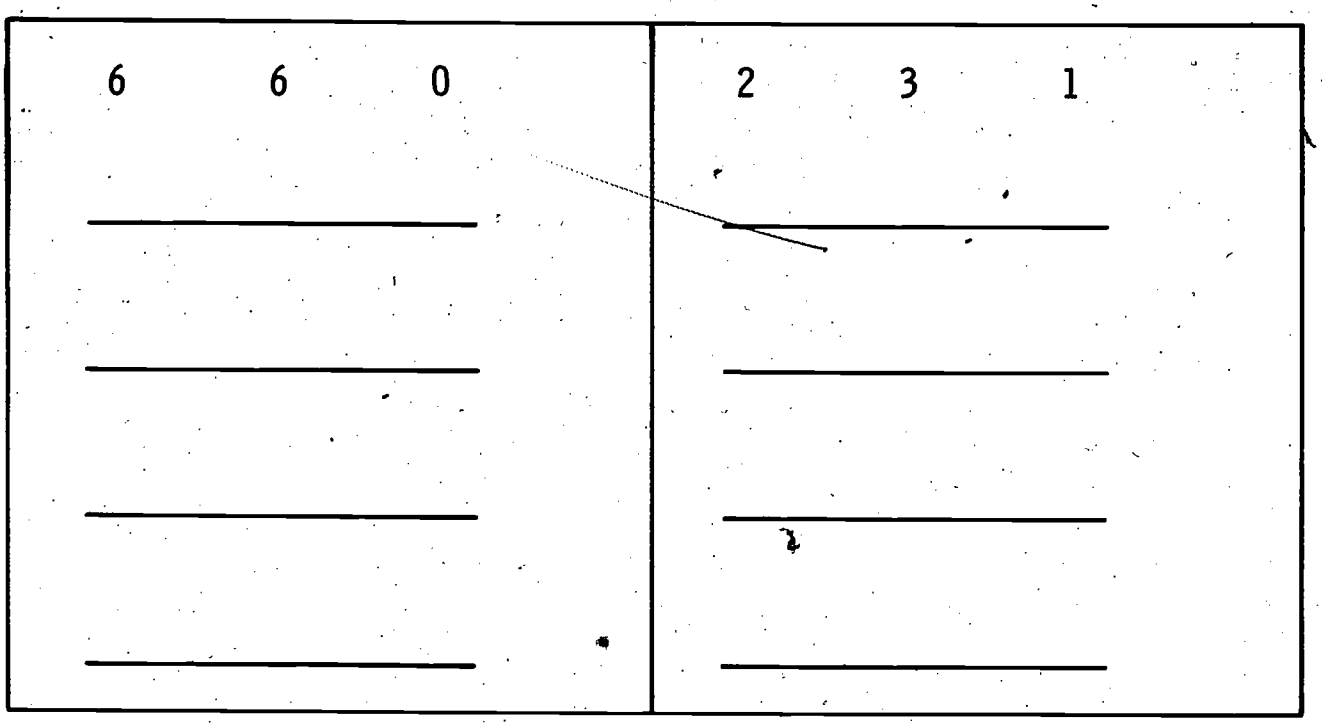
7 - 4 = ____	

★Write 4 equations using 3 numbers.

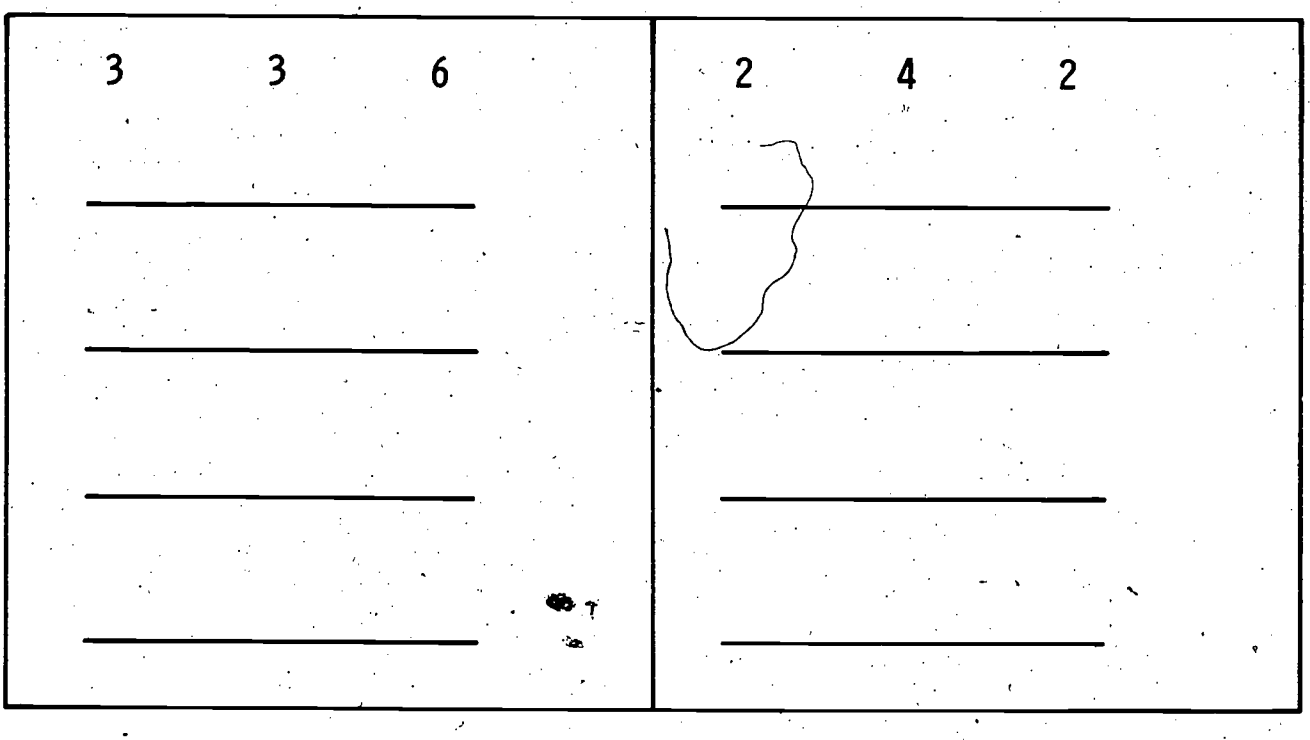
3 1 4	5 1 6
3 + 1 = 4	
1 + =	
4 - 3 =	
4 -	

5 2 3	4 0 4

★ Write 4 equations using 3 numbers.



Write as many equations as you can.



Partitioning Sets

Number of starting set	Number of each subset	Number of equivalent subsets	Number of remainder set
17	3		
10	4		
6	2		
13	4		
21	3		
15	5		
18	2		
25	5		
21	10		

Counting by Twos

2	4	6		

32

Counting by Fives

5	10	15		

Count Back by Fives

85	80			

Counting by Tens

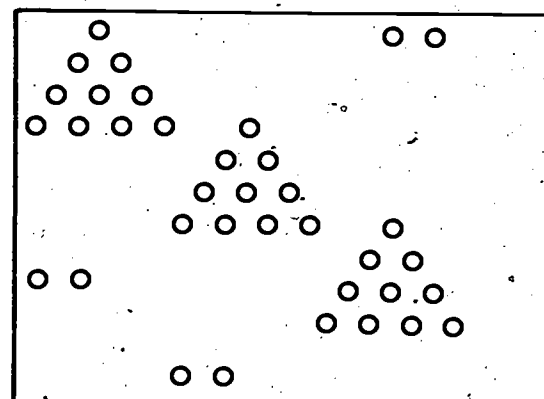
10	20			

5	15			

27	37			

49				

Renaming Numbers
Fill the blanks.



tens	ones	number names
3	6	30 + 6 = 36
2	3	___ + ___ = ___
___	___	___ + ___ = ___
___	___	___ + ___ = ___
___	___	___ + ___ = ___

Renaming Numbers
Fill the blanks.

36	30 + 6	3 tens	6 ones
47	_____	___ tens	___ ones
73	_____	___ tens	___ ones
61	_____	___ tens	___ ones
6	_____	___ tens	___ ones
25	_____	___ tens	___ ones
99	_____	___ tens	___ ones
12	_____	___ tens	___ ones
84	_____	___ ones	___ tens
22	_____	___ tens	___ ones
30	_____	___ ones	___ tens
75	_____	___ tens	___ ones

Renaming Numbers
Fill the blanks.

5 tens 2 ones	_____	_____
7 tens 0 ones	_____	_____
4 tens 9 ones	_____	_____
8 tens 5 ones	_____	_____
0 tens 4 ones	_____	_____
3 tens 8 ones	_____	_____
1 ten 1 one	_____	_____
6 tens 2 ones	_____	_____

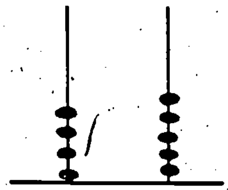
---

2 tens 6 ones	_____	_____
9 ones 0 tens	_____	_____
8 tens 6 ones	_____	_____
4 tens 0 ones	_____	_____

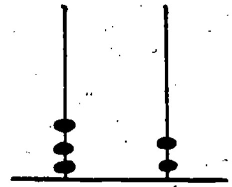
Renaming Numbers
Fill in the blanks.

50 + 3	5 tens	3 ones	53
70 + 1	___ tens	___ ones	_____
30 + 5	___ tens	___ ones	_____
20 + 8	___ tens	___ ones	_____
10 + 7	___ tens	___ ones	_____
60 + 5	___ tens	___ ones	_____
30 + 2	___ tens	___ ones	_____
90 + 6	___ tens	___ ones	_____
40 + 4	___ ones	___ tens	_____
70 + 8	___ tens	___ ones	_____
10 + 3	___ ones	___ tens	_____
30 + 5	___ tens	___ ones	_____

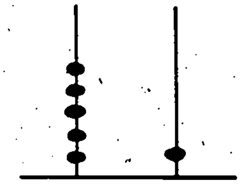
Tens and Ones on the Abacus
Fill in the blanks.



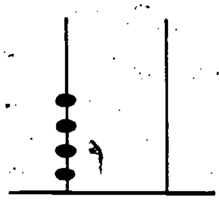
___ tens ___ ones



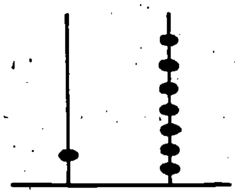
___ tens ___ ones



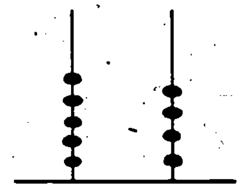
___ tens ___ ones



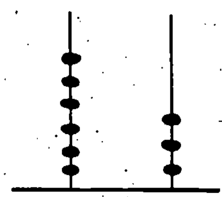
___ tens ___ ones



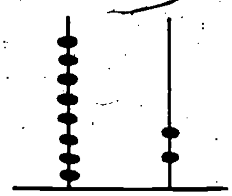
___ tens ___ ones



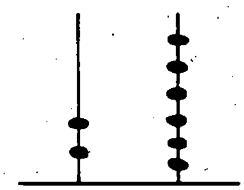
___ tens ___ ones



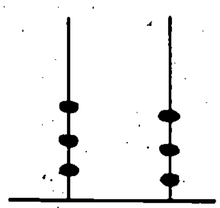
___ tens ___ ones



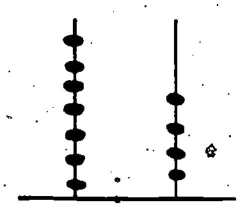
___ tens ___ ones



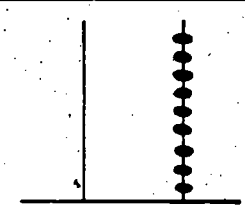
___ tens ___ ones



___ tens ___ ones

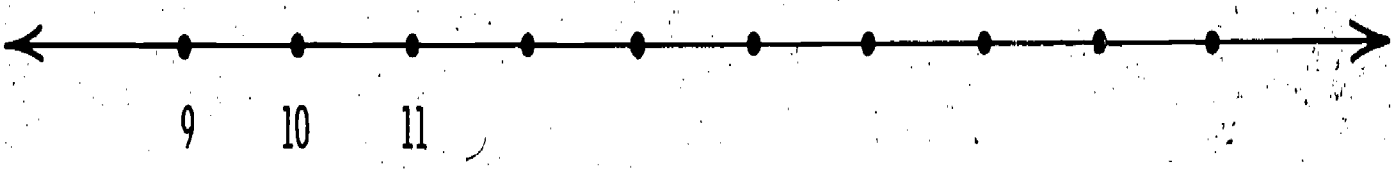


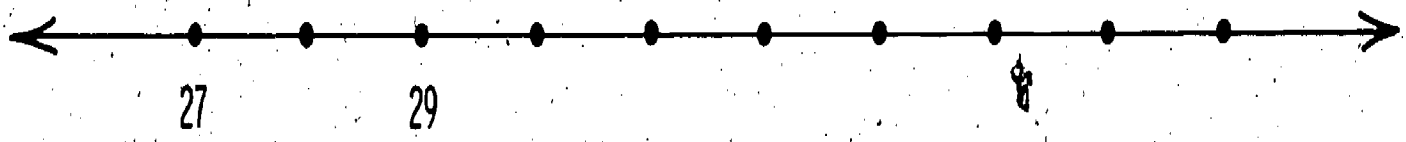
___ tens ___ ones

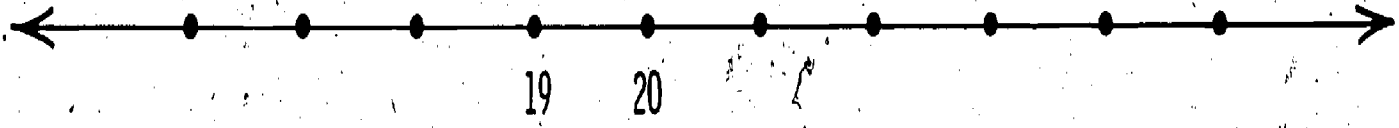


___ tens ___ ones

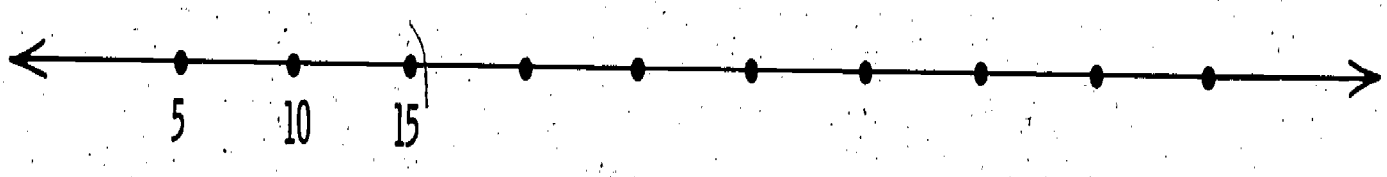
The Number Line

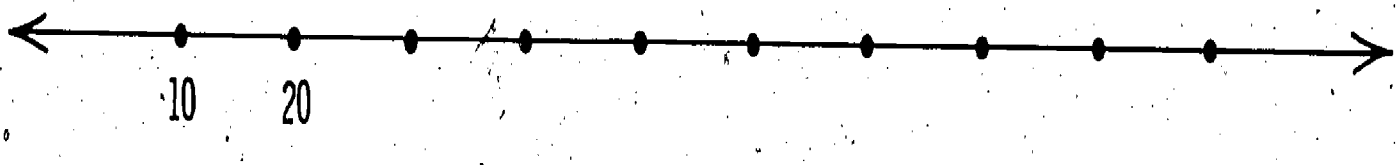


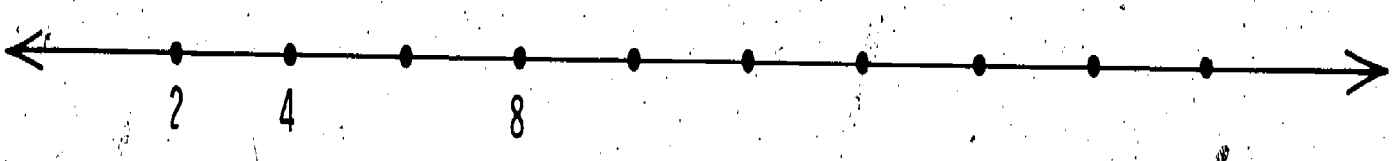


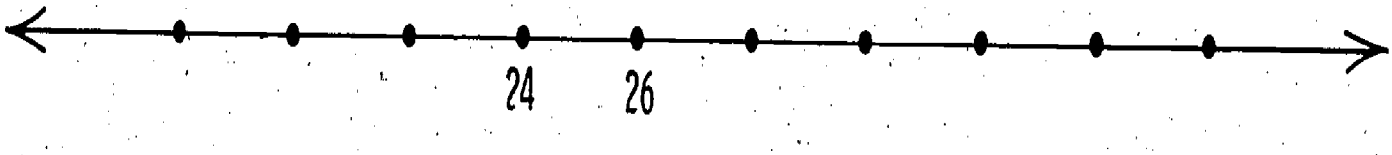


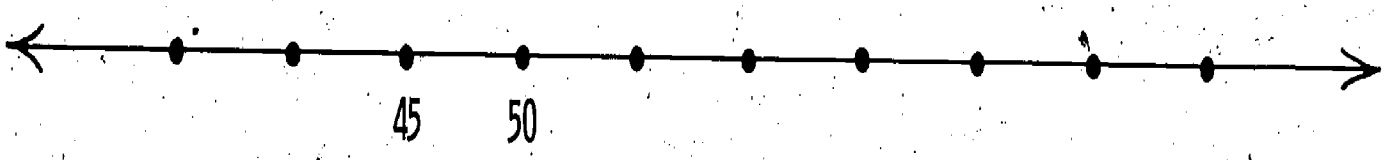
The Number Line





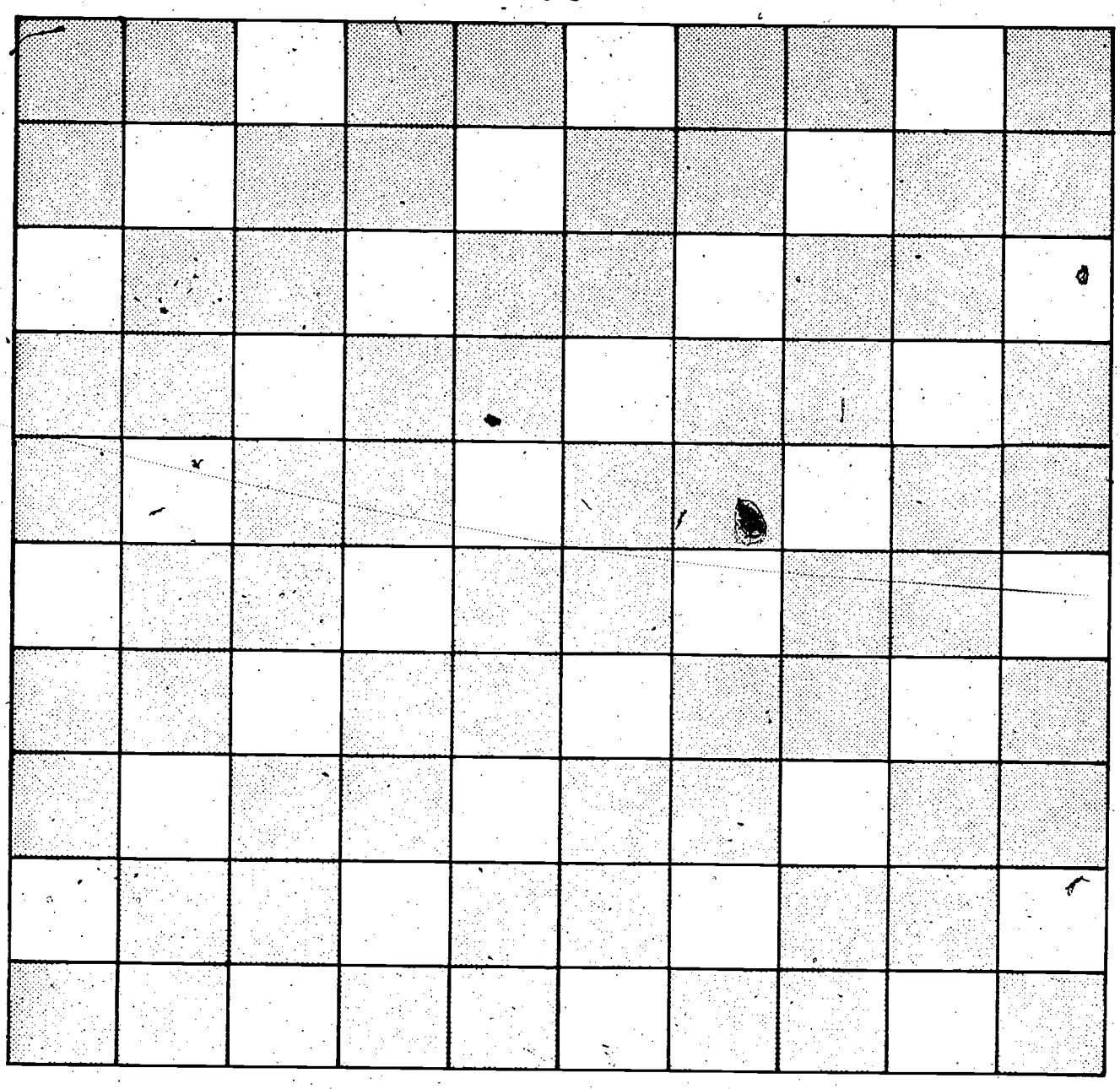




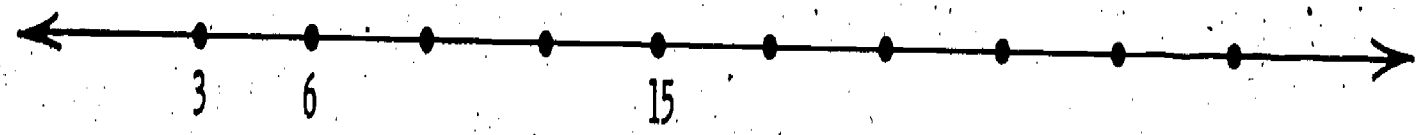


★ Counting

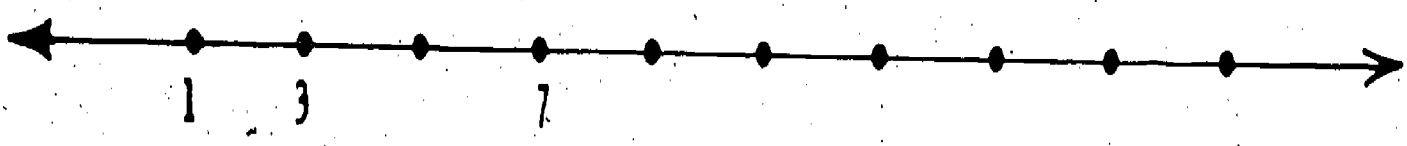
3's

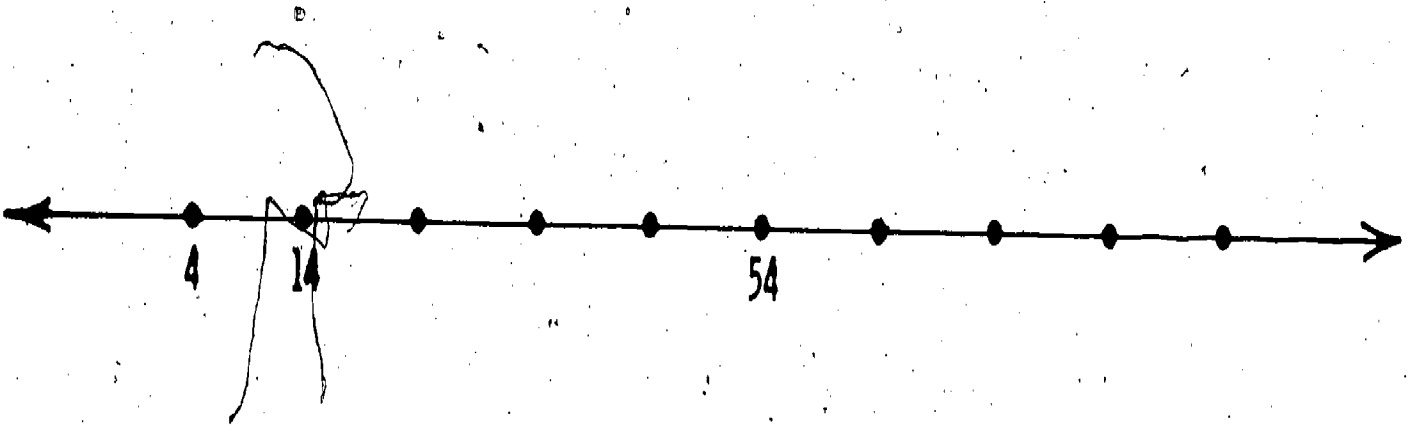


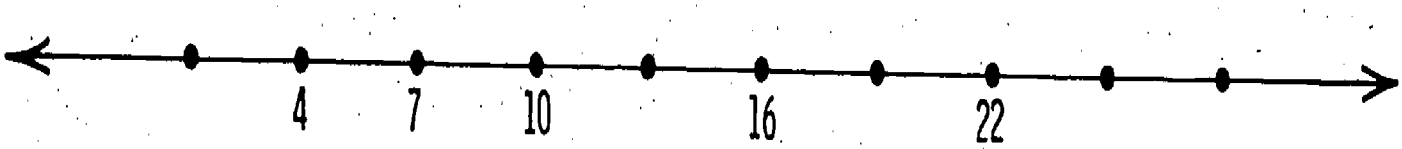
★The Number Line



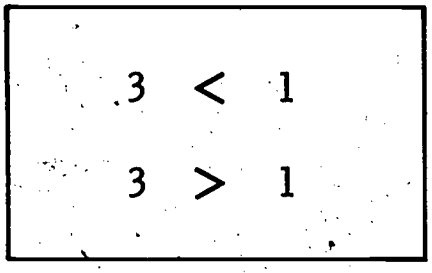
35

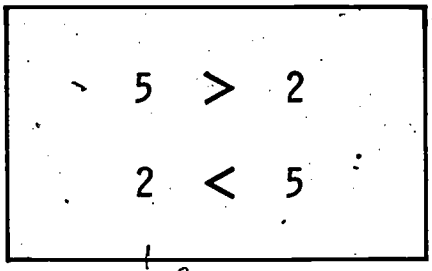


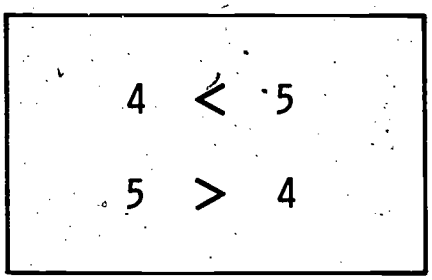


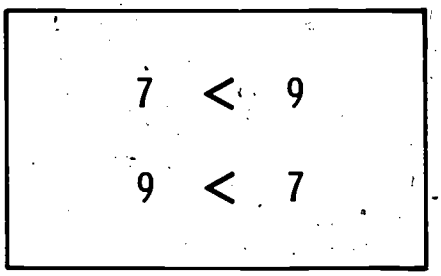


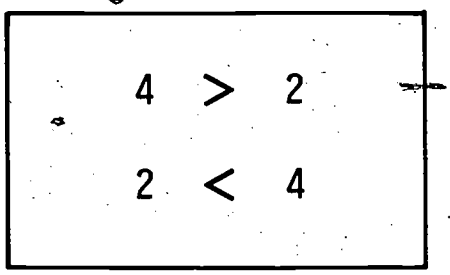
Order of Numbers

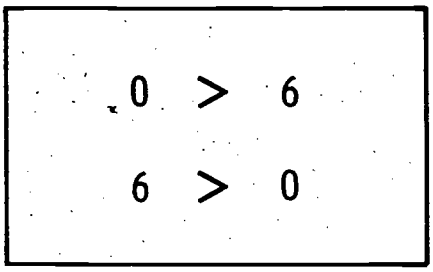


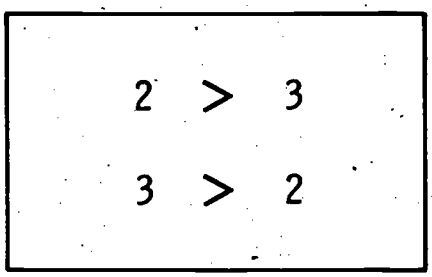












Order of Numbers

5 is greater than 1.	$5 > 1$
1 is less than 5.	$1 < 5$
4 is less than 6.	
1 is greater than 0.	
10 is greater than 8.	
2 is less than 5.	
9 is less than 10.	
3 is greater than 1.	
6 is greater than 2.	
7 is less than 9.	
5 is less than 7.	
8 is less than 10.	
2 is greater than 1.	

Order of Numbers

Write > or <

3 2	70 78	34 32
8 9	52 57	60 80
6 3	36 31	21 29
1 5	62 68	12 20
5 2	24 20	69 71
9 4	10 30	81 86
3 8	47 44	58 53
7 1	48 53	61 39

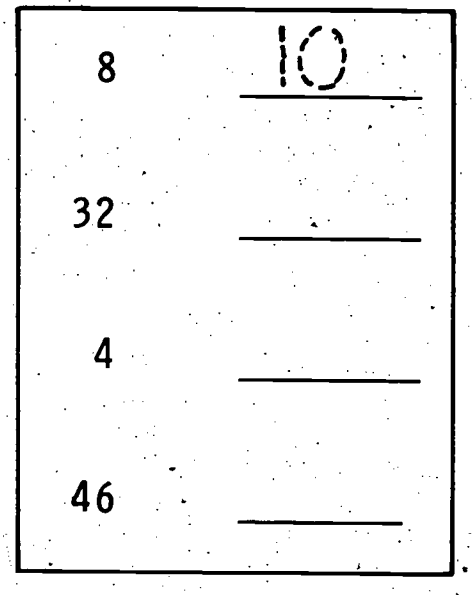
Even Numbers

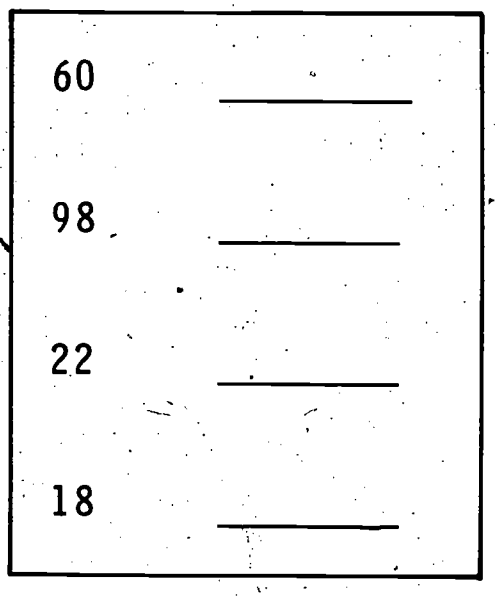
Fill in the boxes.

0	2	4		
10				
			26	
	42			
		74		
			86	
90				98

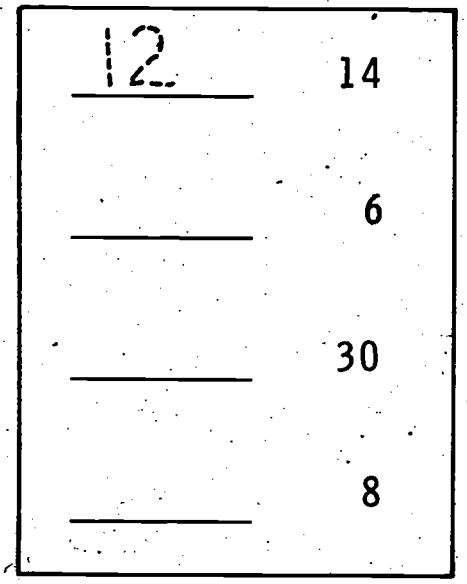
Even Numbers

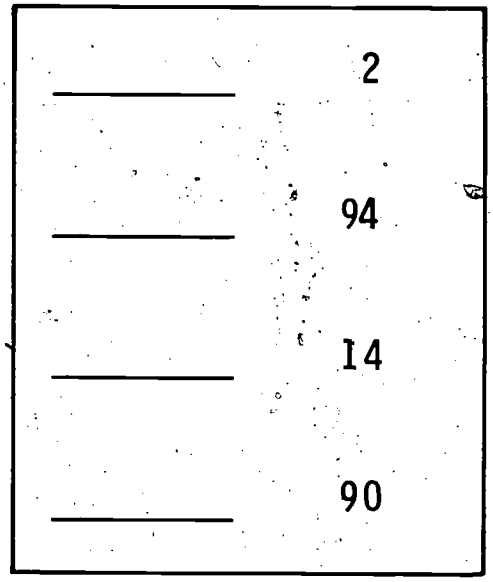
Which even number comes next?





What even number comes before?





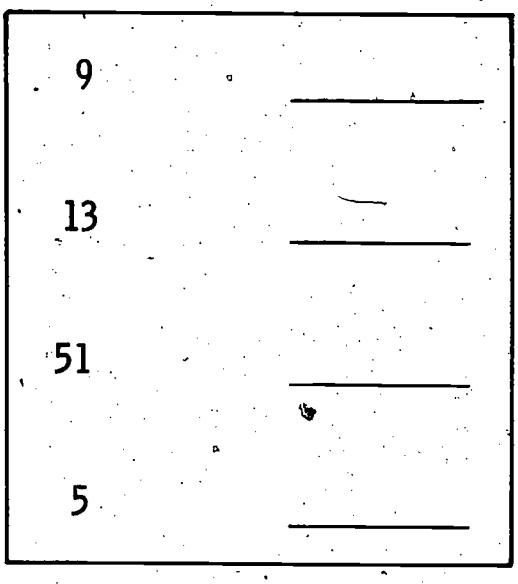
Odd Numbers

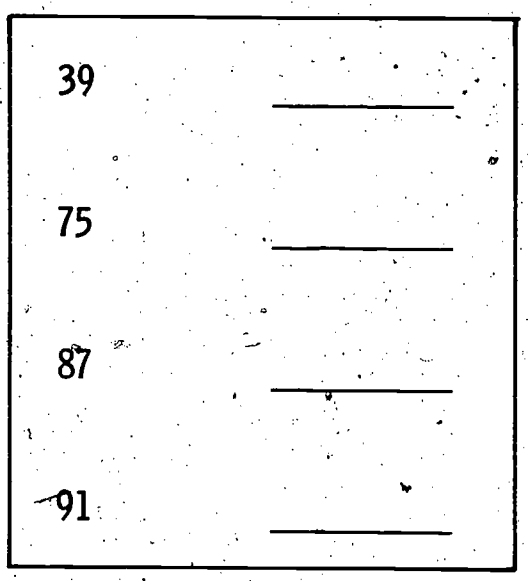
Fill in the boxes.

1	3	5		
11				
			27	
				39
	53			
		65		
71				
			87	
				99

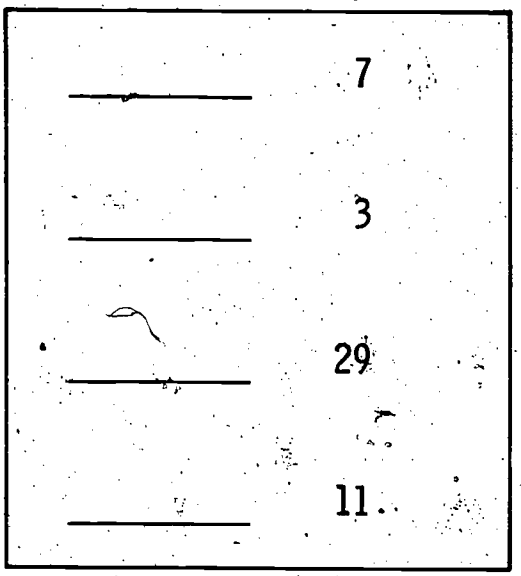
Odd Numbers

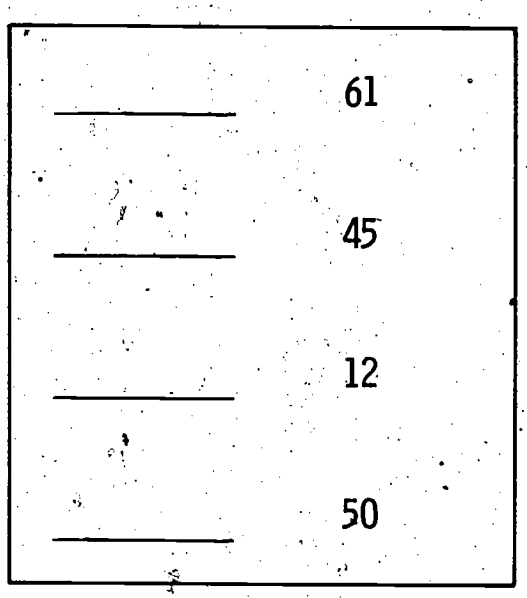
What odd number comes next?





What odd number comes before?





Even and Odd Numbers

★ Fill the blanks.

2 + 2 = _____	6 + 0 = _____
0 + 8 = _____	4 + 2 = _____
4 + 2 = _____	0 + 4 = _____
2 + 4 = _____	2 + 0 = _____

All the addends above are even odd.

All the sums are even odd.

---

1 + 3 = _____	1 + 5 = _____
1 + 1 = _____	3 + 3 = _____
5 + 1 = _____	5 + 3 = _____
3 + 1 = _____	5 + 5 = _____

All the addends are even odd.

All the sums are even odd.

★ Fill the blanks.

2 + 1 = _____

5 + 0 = _____

4 + 1 = _____

3 + 2 = _____

0 + 3 = _____

3 + 0 = _____

2 + 3 = _____

5 + 2 = _____

---

2 + 2 = _____

1 + 2 = _____

4 + 2 = _____

3 + 2 = _____

6 + 2 = _____

5 + 2 = _____

8 + 2 = _____

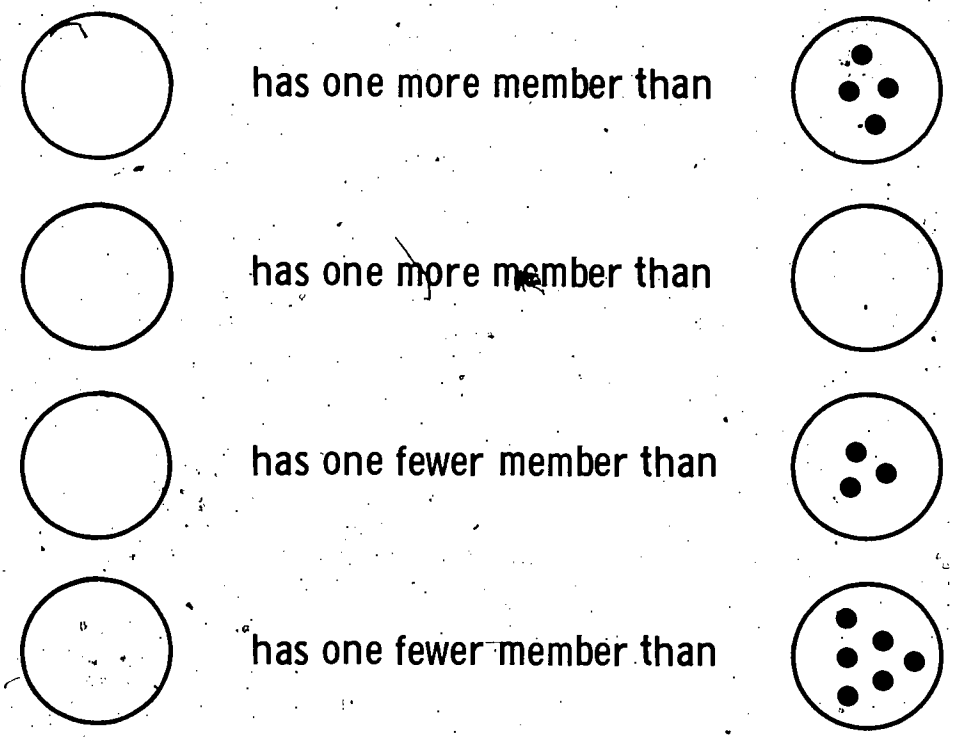
7 + 2 = _____

10 + 2 = _____

9 + 2 = _____

REVIEW EXERCISES FOR CHAPTER I

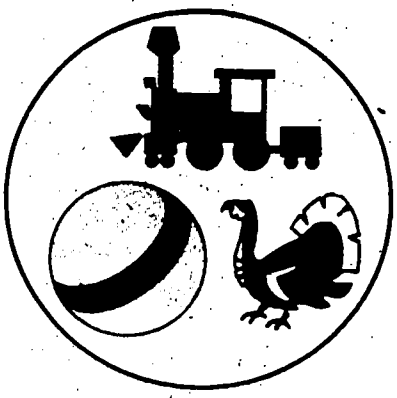
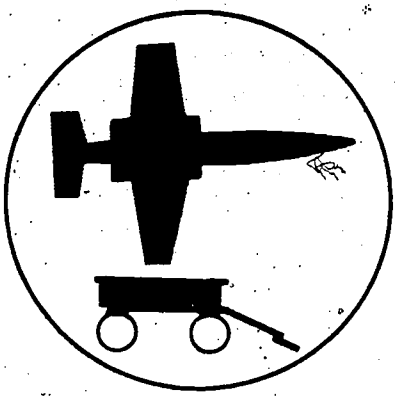
Show sets. Use X's.



Write > or <.

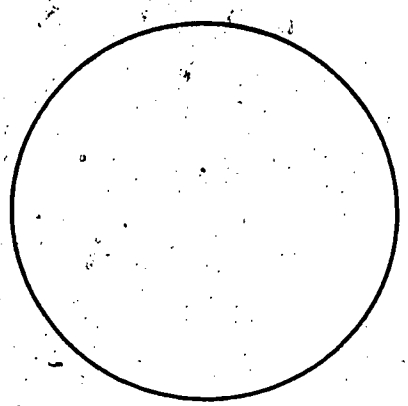
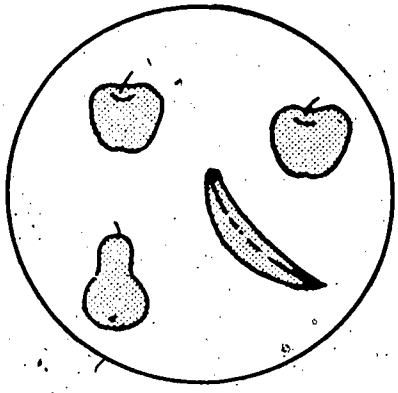
4	6	39	24
7	1	48	40
15	16	90	88
19	52	12	21

Addition and Equations

Join  and 

Equations: _____

_____

Join  and 

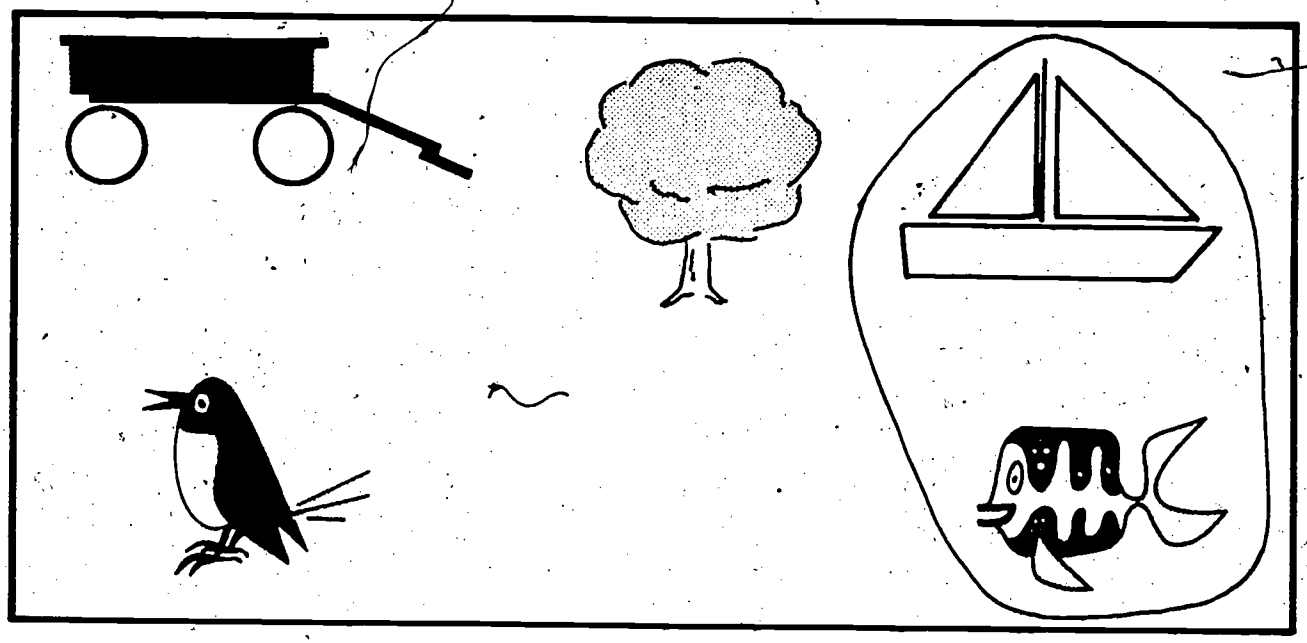
Equations: _____

_____

Fill the blanks:

4 + 1 = _____	4 + 2 = _____	2 + 4 = _____
6 + 0 = _____	1 + _____ = 6	_____ + 2 = 5
2 + 3 = _____	3 + 3 = _____	2 + 2 = _____

Subtraction and Equations



How many are in the starting set? _____

How many are in the set removed? _____

How many are in the set remaining? _____

Equation: _____

Fill the blanks:

6 - 5 = _____

4 - 2 = _____

5 - 0 = _____

4 - 4 = _____

6 - 2 = _____

3 - 1 = _____

6 - _____ = 2

5 - 3 = _____

5 - 2 = _____

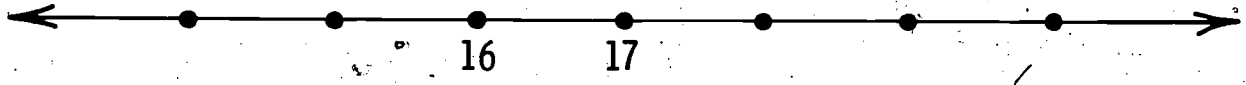
4 - 3 = _____

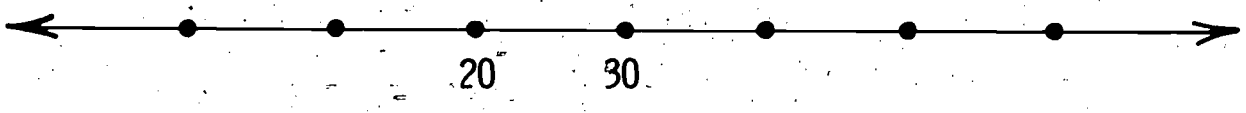
Fill in the blank in the first equation.

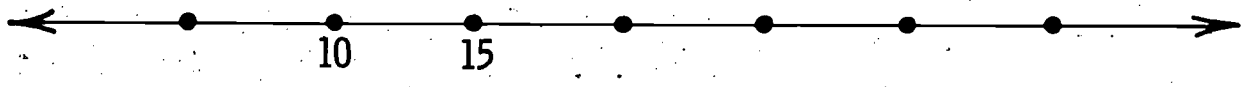
Write an equation to show undoing.

4 + 1 = _____ _____	2 + 3 = _____ _____	6 - 3 = _____ _____
3 + 2 = _____ _____	5 - 5 = _____ _____	3 - 0 = _____ _____

Write the numerals.







Fill the blanks.

6	8	10	_____	_____	_____	_____
_____	9	11	13	_____	_____	_____
_____	_____	_____	40	50	60	_____
_____	_____	_____	_____	35	40	45

Draw rings to show even numbers.

7	36	13	22	15	62
49	28	16	0	57	81

What odd number comes before?

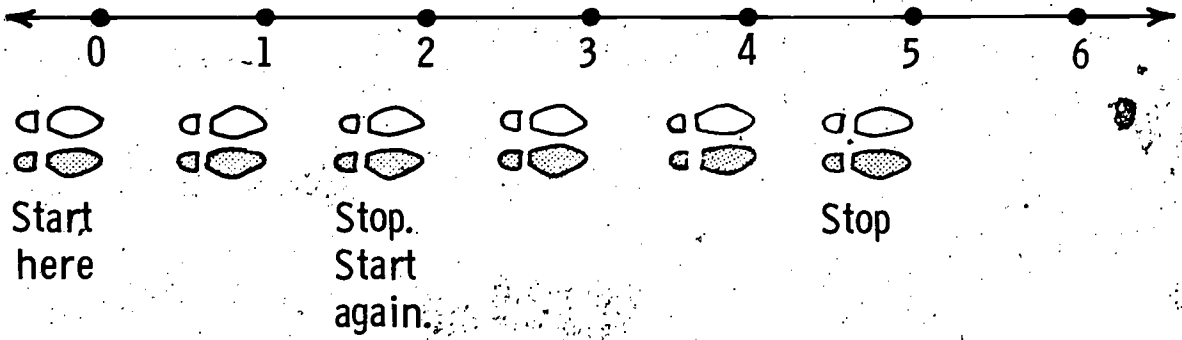
_____ 15	_____ 9	_____ 21
_____ 91	_____ 13	_____ 68

What even number comes after?

26 _____	38 _____	98 _____
54 _____	0 _____	81 _____

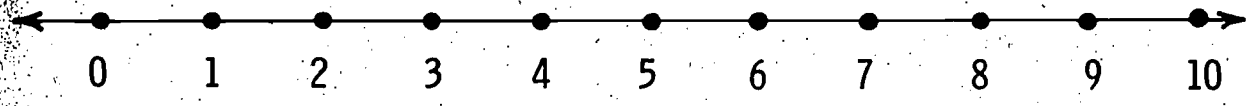
Using a Number Line When Adding

Show a picture of 2 + 3 = 5.



What point shows the sum of 2 and 3? _____

Show a picture of 3 + 2 = 5.

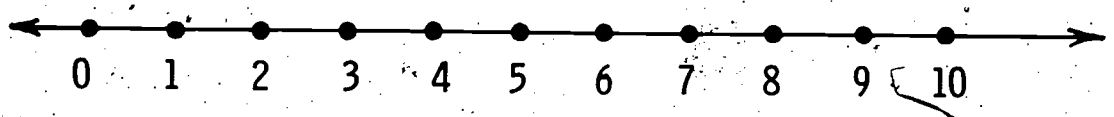


What is the sum of 3 and 2? _____

Look at both pictures.

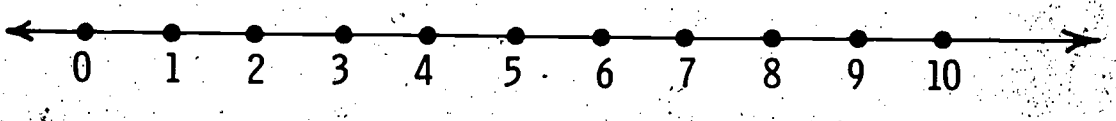
2 + 3 = 3 + _____

Use the number line to show the sum of 6 and 2.



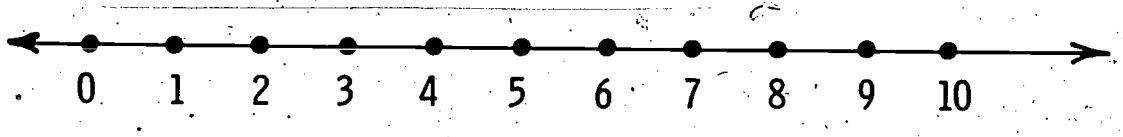
Equation: 6 + 2 = _____

Use the number line to show the sum of 3 and 7.



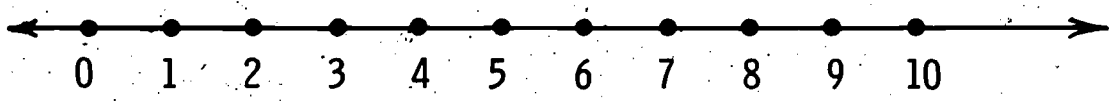
Equation: _____

Use the number line to show the sum of 4 and 5.



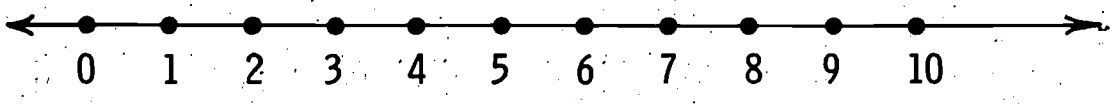
Equation: _____

Use the number line to show the sum of 5 and 3.



Equation: _____

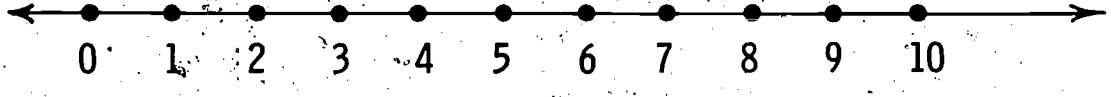
Use the number line to show the sum of 3 and 5.



Equation: _____

5 + 3 = 3 + _____

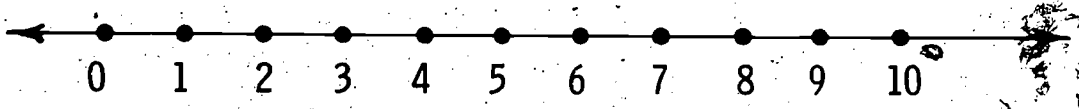
Use the number line to show the sum of 9 and 0.



Equation: _____

What point shows the sum of 9 and 0? _____

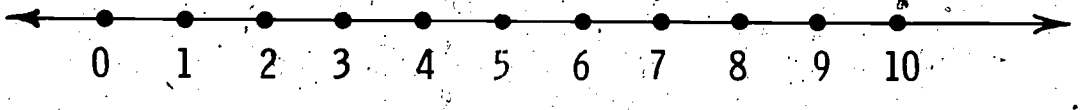
Use the number line to show the sum of 0 and 7.



Equation: _____

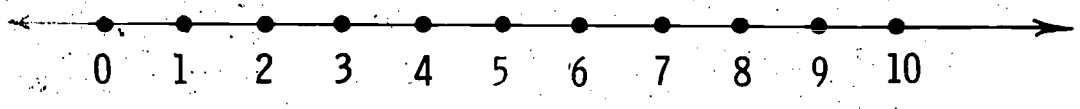
What point shows the sum of 0 and 7? _____

Use the number line to show the sum of 6 and 1.



Equation: _____

Use the number line to show the sum of 1 and 8.



Equation: _____

Renaming Sums

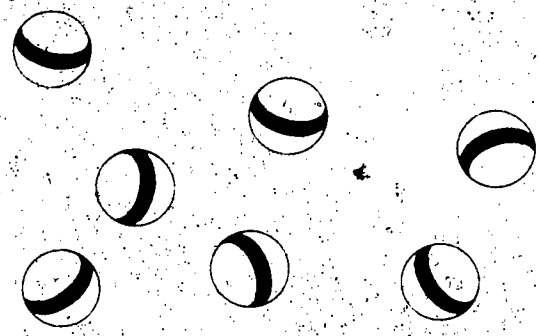
Fill the blanks.

6 + 0 = _____	8 + 0 = _____	9 + 0 = _____
6 + 1 = _____	8 + 1 = _____	9 + 1 = _____
6 + 2 = _____	8 + 2 = _____	9 + 2 = _____
7 + 0 = _____	6 + 0 = _____	5 + 0 = _____
7 + 1 = _____	6 + 1 = _____	5 + 1 = _____
7 + 2 = _____	6 + 2 = _____	5 + 2 = _____

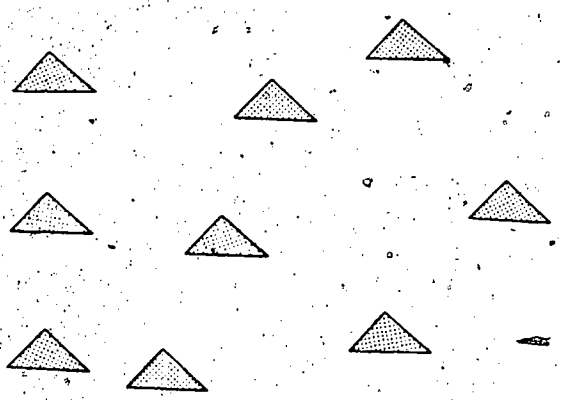
Fill the blanks:

1 + 8 = _____	0 + 7 = _____	2 + 8 = _____
0 + 9 = _____	2 + 5 = _____	1 + 9 = _____
1 + 6 = _____	37 + 0 = _____	68 + 1 = _____
26 + 1 = _____	59 + 1 = _____	46 + 2 = _____

Partitions of Sets

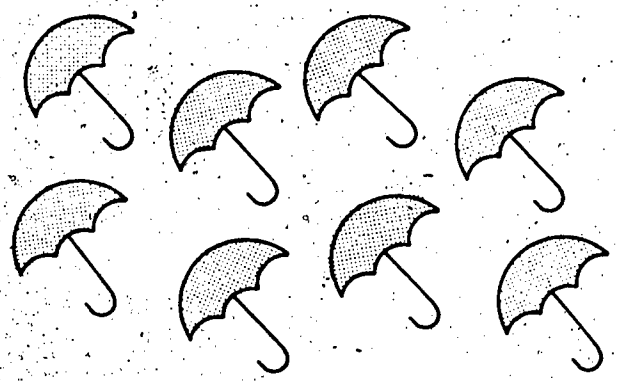


7 = 1 + 6

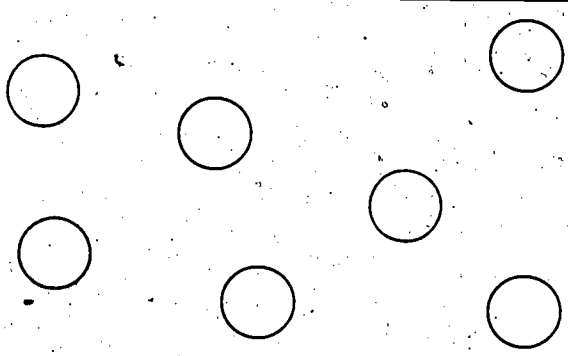


9 = 4 + _____

10 = 3 + _____

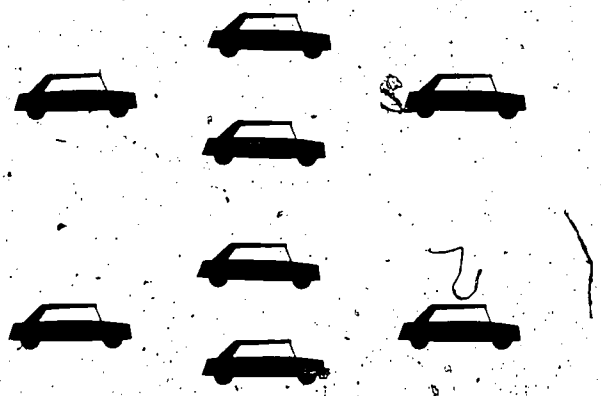


8 = 2 + _____

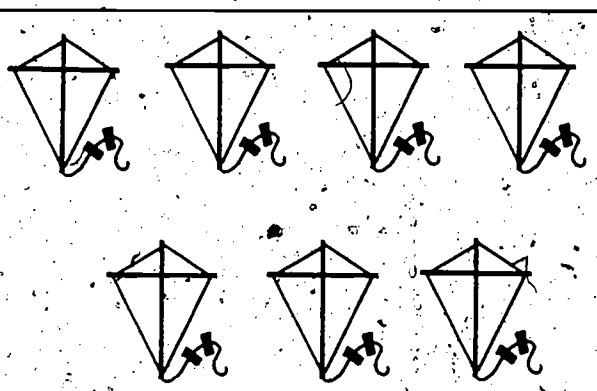


7 = 5 + _____

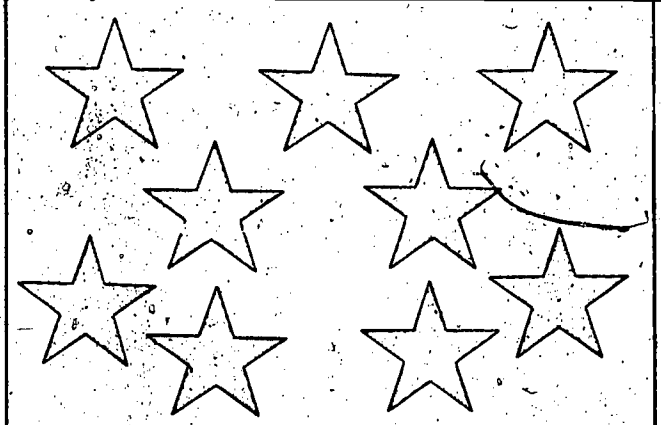
9 = 6 + _____



8 = 4 + 4

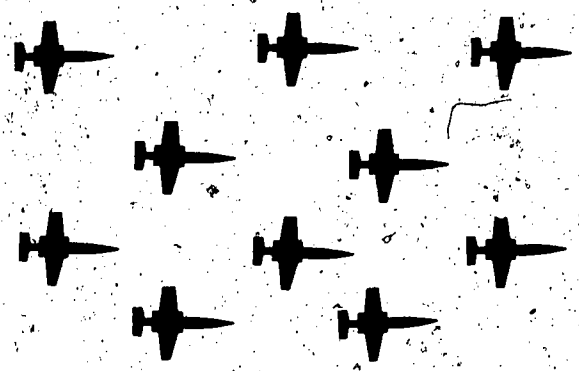


____ = 2 + ____



____ = 3 + ____

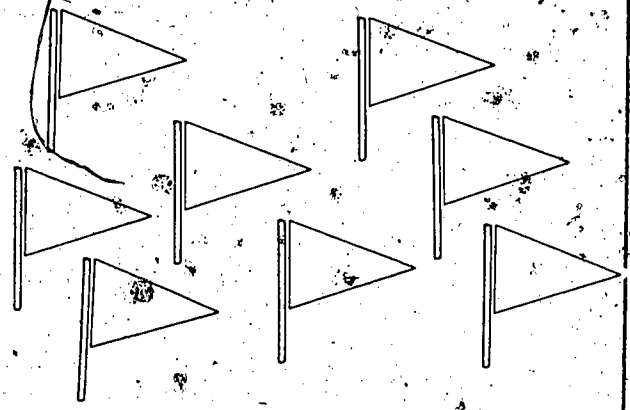
____ = 6 + ____



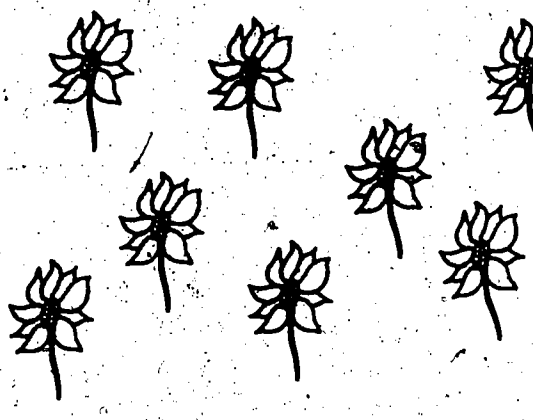
____ = 5 + ____

____ = 1 + ____

_____ = 4 + _____

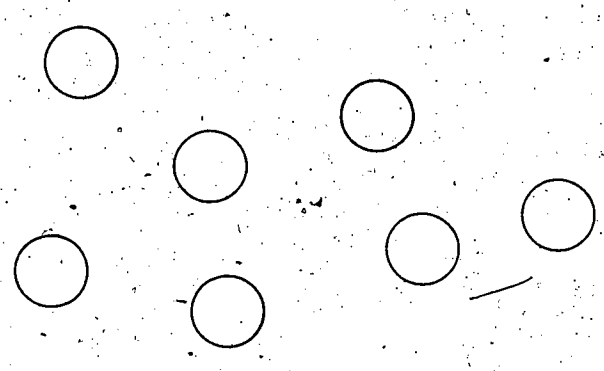


_____ = 1 + _____

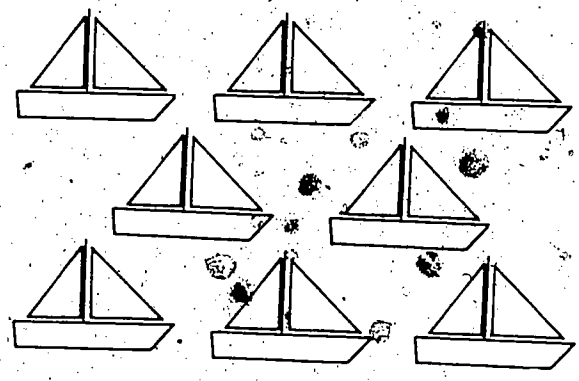


_____ = 5 + _____

_____ = 7 + _____



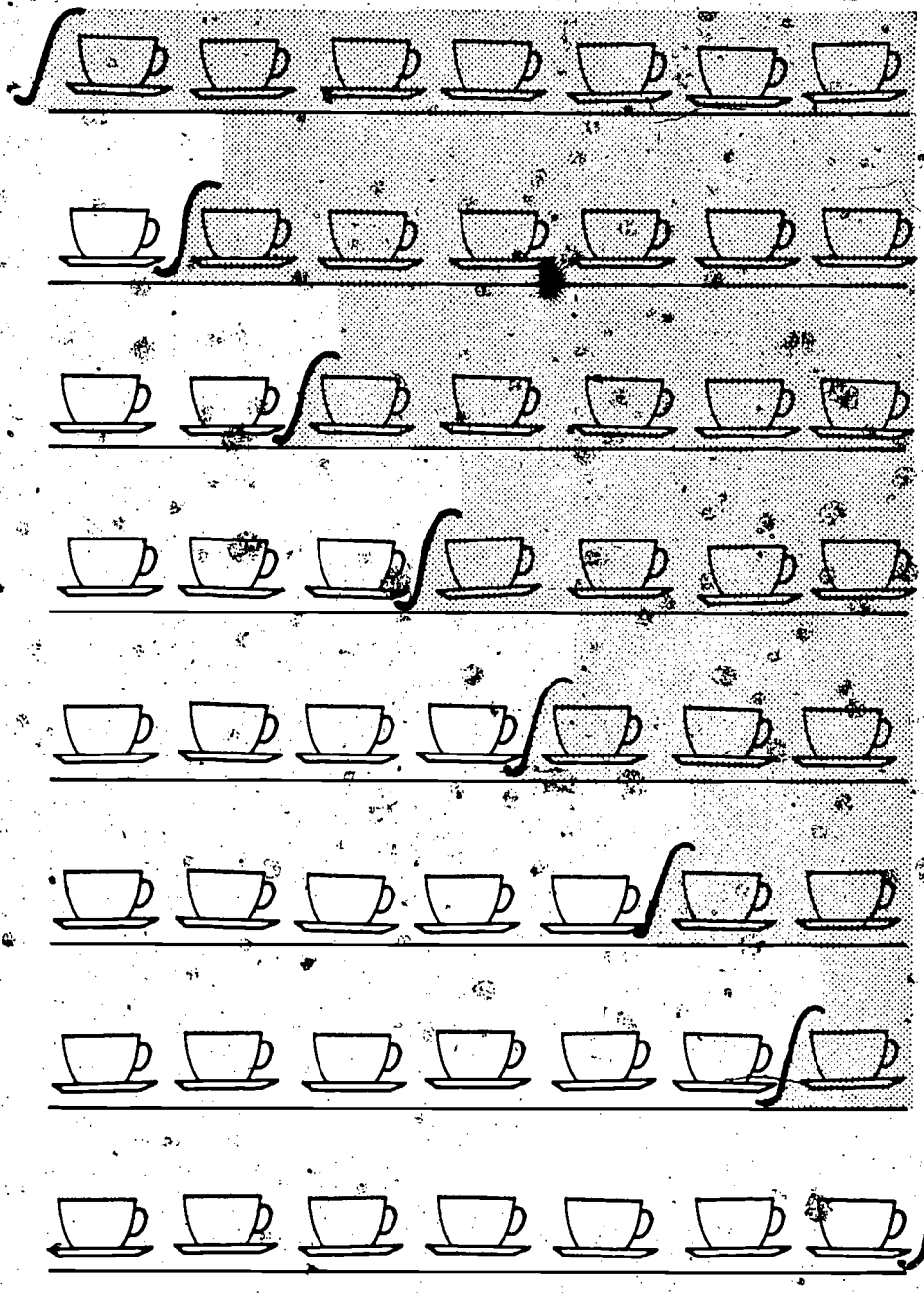
_____ = 2 + _____



_____ = 6 + _____

Partitions of Sets of Seven

Write about the partitions of the sets of seven pictured below.



7 = 0 + 7

7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

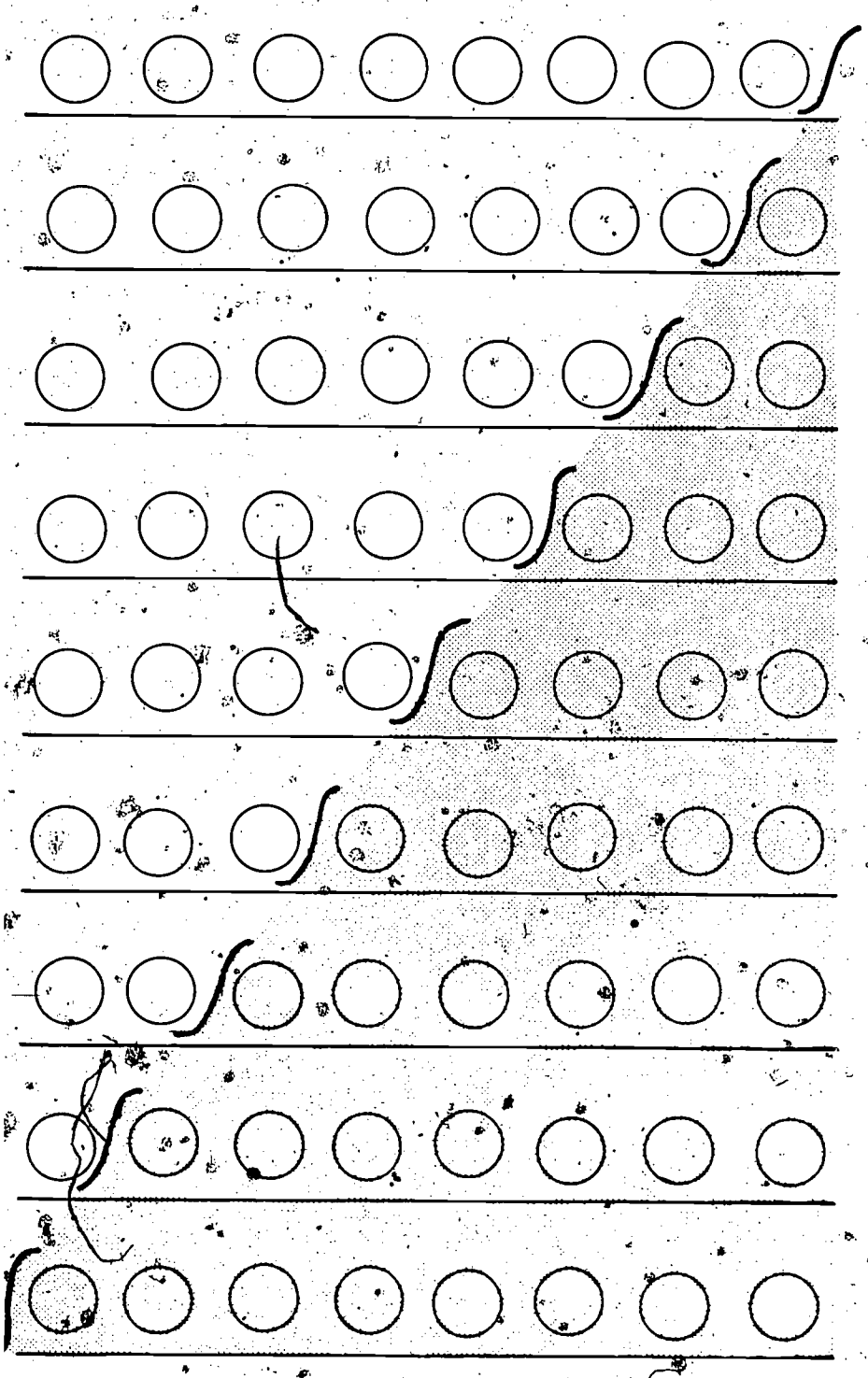
7 = ___ + ___

7 = ___ + ___

7 = ___ + ___

Partitions of Sets of Eight

Write about the partitions of the sets of eight pictured below.



8 = 8 + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

8 = ___ + ___

Numbers and Their Sums

Fill in the blanks:

5 + 3 = _____ 3 + 5 = _____	2 + 5 = _____ 5 + 2 = _____	4 + _____ = 7 3 + _____ = 7
8 + 0 = _____ 0 + 8 = _____	6 + 1 = _____ 1 + ___ = ___	5 + 1 = _____ 1 + ___ = ___
1 + 7 = _____ _____	0 + 7 = _____ _____	6 + 2 = _____ _____

Fill in the blanks:

6 + 1 = 7 _____ + 6 = 7	8 = 6 + _____ 8 = _____ + 6	7 = _____ + 5 7 = 5 + _____
7 + _____ = 7 _____ + 7 = 7	7 = 4 + _____ 7 = _____ + 4	6 = _____ + 2 6 = _____ + 4
4 + _____ = 7 3 + _____ = 7	8 = _____ + 5 8 = 5 + _____	7 = 4 + _____ 7 = _____ + 4

Numbers and Their Sums

7 is the sum of
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

8 is the sum of
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

Fill in the blanks:

2 + 4 = _____	0 + _____ = 8	5 + 2 = _____
_____ + 6 = 7	_____ + 3 = 8	1 + _____ = 7
3 + _____ = 7	3 + _____ = 6	4 + _____ = 8
5 + 3 = _____	4 + 3 = _____	_____ + 5 = 8

Partitions of Sets of Nine

Write about the paritions of the sets of nine pictured below.

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

9 = ___ + ___

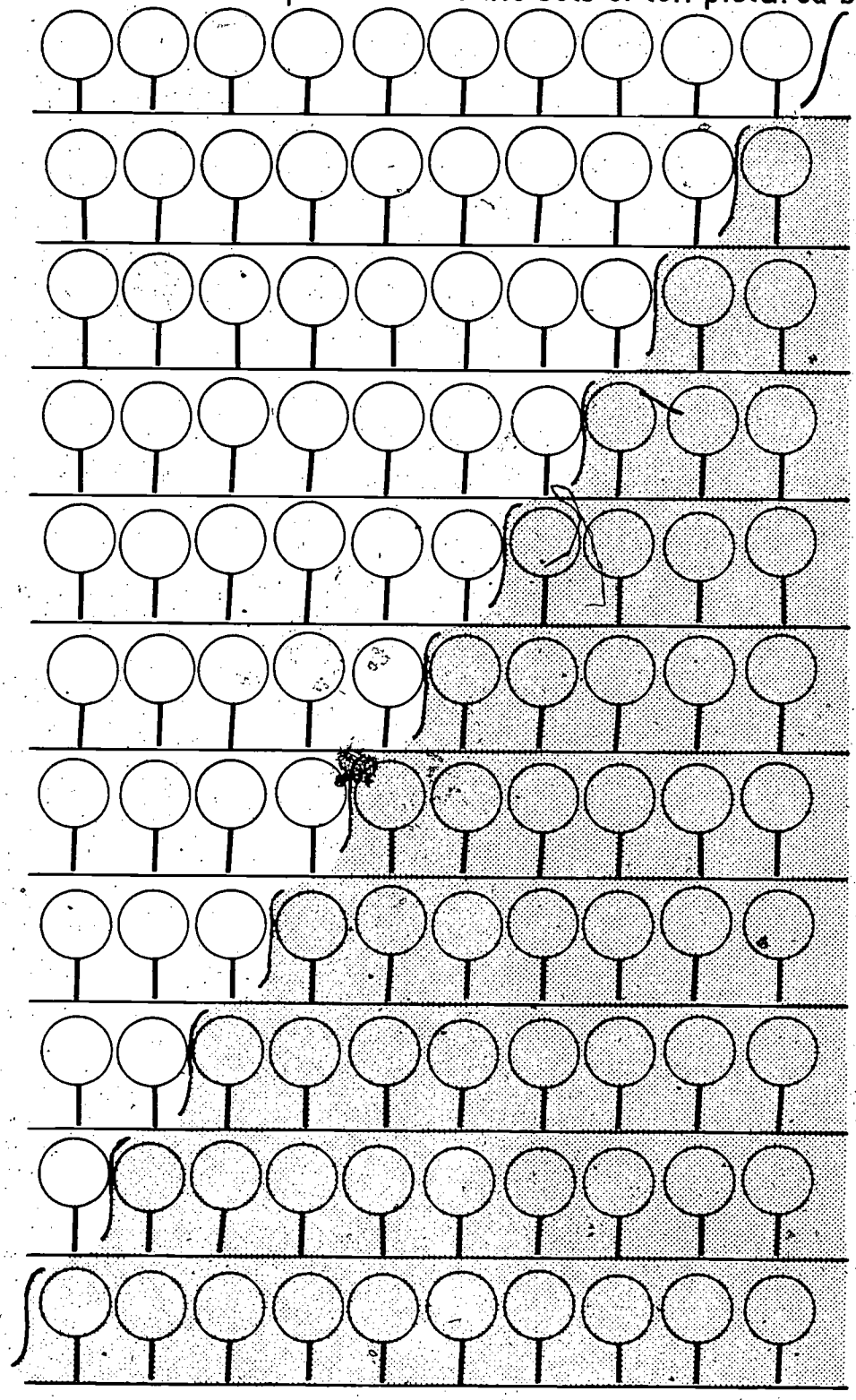
Numbers and Their Sums

Fill in the blanks.

3 + 4 = _____ 7 = 3 + _____	6 + 2 = _____ 8 = 6 + _____	5 + 4 = _____ 9 = 5 + _____
5 + 3 = _____ 3 + _____ = 8	0 + 9 = _____ 9 + _____ = 9	5 + 2 = _____ 2 + _____ = 7
4 + 5 = _____ 9 = 4 + _____	6 + 1 = _____ 7 = 1 + _____	6 + 3 = _____ _____ = 3 + 6
7 + _____ = 7 0 + _____ = 7	2 + _____ = 8 _____ + 6 = 8	4 + _____ = 8 8 = 4 + _____
8 + 0 = _____ 8 = _____ + 0	7 + 2 = _____ 9 = _____ + 7	4 + _____ = 7 7 = _____ + 3

Partitions of Sets of Ten

Write about the partitions of the sets of ten pictured below.



10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

10 = ___ + ___

Numbers and Their Sums

9 is the sum of
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

10 is the sum of
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____
____ and ____

Fill in the blanks:

0 + _____ = 9	6 + _____ = 8	7 + _____ = 10
_____ + 2 = 9	1 + 9 = _____	_____ + 5 = 10
6 + _____ = 10	2 + _____ = 10	_____ + 3 = 9
_____ + 5 = 10	5 + _____ = 9	4 + _____ = 9

Fill the boxes.

+	1
3	
9	
17	

+	0
7	
8	
92	

+	2
8	
7	
36	

+	5
3	
5	
4	
2	

+	4
6	
4	
2	
5	

+	6
3	
2	
4	
0	

An Addition Table

Second Number

First Number

+	0	1	2	3	4	5	6
0							
1							
2							
3			5				
4							
5							
6							

What equation goes with the 5 in the table? _____

Show: 6 + 3 = 9 in the table.

Show: 1 + 3 = 4 in the table.

Show: 4 + 2 = 6 in the table.

Show: 0 + 5 = 5 in the table.

Now finish the table.

An Addition Table

+	0	1	2	3	4	5	6	7	8	9	10
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

Fill the boxes in the table for:

2 + 8	3 + 5	4 + 6	5 + 4	0 + 6
2 + 6	3 + 2	4 + 4	5 + 2	8 + 2
2 + 4	3 + 3	4 + 1	5 + 3	7 + 2
2 + 5	3 + 7	4 + 0	5 + 5	6 + 1

Now finish the table.

Using the Addition Table

Use the table on page 68 to help you fill in the blanks.

5 + 4 = _____ 3 + _____ = 8 _____ + 7 = 9 6 + 2 = _____ 0 + _____ = 9	2 + _____ = 10 9 + 1 = _____ 5 + 2 = _____ 4 + _____ = 10 3 + _____ = 10
4 + _____ = 9 7 + _____ = 10 _____ + 2 = 10 6 + _____ = 9 5 + 3 = _____ 7 + 1 = _____	7 + 2 = _____ 0 + _____ = 7 8 + _____ = 10 6 + _____ = 6 3 + _____ = 7 4 + 4 = _____

★ An Addition Table

+	34	35	36	37	38	39	40
34	68	69	70	71	(72)	73	74
35	69	70	(71)	72	73	74	75
36	70	71	72	73	74	75	76
37	71	72	73	74	75	76	77
38	72	(73)	74	75	(76)	77	78
39	73	74	75	76	77	78	(79)
40	74	75	76	(77)	78	79	80

What equations go with the numbers shown by the rings?

_____ = 71

_____ = 72

_____ = 77

_____ = 76

_____ = 73

_____ = 79

Partitions and Subtraction

7
is the sum of

3 and ____

4 and ____

7 and ____

0 and ____

5 and ____

2 and ____

6 and ____

1 and ____

Subtracting from 7

7 - 3 = ____

7 - 4 = ____

7 - 7 = ____

7 - 0 = ____

7 - 5 = ____

7 - 2 = ____

7 - 6 = ____

7 - 1 = ____

6 - 4 = ____ 6 - 2 = ____	7 - 5 = ____ 7 - 2 = ____	5 - 3 = ____ 5 - 2 = ____
7 - 3 = ____ 7 - 4 = ____	5 - 1 = ____ 5 - 4 = ____	7 - 0 = ____ 7 - 7 = ____

Partitions and Subtraction

8 is the sum of

2 and ____

5 and ____

8 and ____

1 and ____

7 and ____

4 and ____

3 and ____

6 and ____

0 and ____

Subtracting from 8

8 - 2 = ____

8 - 5 = ____

8 - 8 = ____

8 - 1 = ____

8 - 7 = ____

8 - 4 = ____

8 - 3 = ____

8 - 6 = ____

8 - 0 = ____

8 = 3 + ____ 8 - 3 = ____	7 = 6 + ____ 7 - 6 = ____	8 = 6 + ____ 8 - 6 = ____
7 = 4 + ____ 7 - 4 = ____	8 = 4 + ____ 8 - 4 = ____	8 = 8 + ____ 8 - 8 = ____

Partitions and Subtraction

9 is the sum of

1 and ____

3 and ____

0 and ____

7 and ____

4 and ____

6 and ____

9 and ____

8 and ____

5 and ____

2 and ____

Subtracting from 9

9 - 1 = ____

9 - 3 = ____

9 - 0 = ____

9 - 7 = ____

9 - 4 = ____

9 - 6 = ____

9 - 9 = ____

9 - 8 = ____

9 - 5 = ____

9 - 2 = ____

9 = 3 + ____ ____ - 3 = 6	8 = 4 + ____ ____ - 4 = 4	9 = 0 + ____ ____ - 0 = 9
9 = 5 + ____ ____ - 5 = 4	9 = 7 + ____ ____ - 7 = 2	8 = 6 + ____ ____ - 6 = 2

Partitions and Subtraction

10
is the sum of

1 and ____

0 and ____

4 and ____

10 and ____

7 and ____

2 and ____

6 and ____

8 and ____

3 and ____

9 and ____

5 and ____

Subtracting from
10

10 - 1 = ____

10 - 0 = ____

10 - 4 = ____

10 - 10 = ____

10 - 7 = ____

10 - 2 = ____

10 - 6 = ____

10 - 8 = ____

10 - 3 = ____

10 - 9 = ____

10 - 5 = ____

More Practice

8 - 1 = _____	7 = 3 + _____
4 + 2 = _____	8 = 5 + _____
8 - 5 = _____	8 = _____ + 6
8 + 0 = _____	4 = 0 + _____
7 - 4 = _____	3 = 7 - _____
3 + 4 = _____	0 = 5 - _____
2 + 7 = _____	5 = 7 - _____
10 = _____ + 6	3 + 7 = _____
10 = 10 + _____	3 + _____ = 9
10 = 7 + _____	_____ - 8 = 2
9 - 7 = _____	9 = 5 + _____
9 - 1 = _____	9 = _____ + 7
9 - 4 = _____	_____ = 8 + 1

Writing Equations

Put in + or - to make equations.

7 3 = 10	5 2 = 7
10 5 = 5	7 0 = 7
10 8 = 2	3 6 = 9
6 4 = 10	8 5 = 3
1 9 = 10	2 7 = 9

Write 4 equations using the numbers:

5, 4, 9	7, 3, 10	3, 5, 8
5 + ____ = ____	____	____
____ + 5 = ____	____	____
____ - 4 = 5	____	____
____ - ____ = ____	____	____

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Writing Equations

Fill in the blanks.

3 + _____ = 8 _____ + 3 = 8 8 - 3 = _____	2 + _____ = 9 _____ + 2 = 9 9 - 2 = _____	4 + _____ = 10 _____ + 4 = 10 10 - 4 = _____
6 + _____ = 9 _____ + 6 = 9 9 - 6 = _____	7 + _____ = 10 _____ + 7 = 10 10 - 7 = _____	5 + _____ = 7 _____ + 5 = 7 7 - 5 = _____

Write 2 more equations if you need them.

2 + _____ = 8 _____ _____	5 + _____ = 10 _____ _____	1 + _____ = 9 _____ _____
4 + _____ = 7 _____ _____	3 + _____ = 10 _____ _____	2 + _____ = 10 _____ _____

★ Fill in the blanks at the bottom of the page.

Some of the equations at the top of the page can be used to help you.

42 - 16 = 26

16 + 42 = 58

100 + 81 = 181

100 - 81 = 19

119 + 375 = 495

119 + 256 = 375

98 + 56 = 154

98 - 56 = 42

139 - 41 = 98

139 + 41 = 180

432 + 750 = 1182

318 + 432 = 750

79 + 94 = 173

15 + 79 = 94

35 - 26 = 9

26 + 35 = 61

---

56 + _____ = 98

41 + _____ = 139

_____ + 16 = 42

750 - _____ = 432

_____ - 35 = 26

81 + _____ = 100

79 + _____ = 94

375 - _____ = 119

Solving Problems

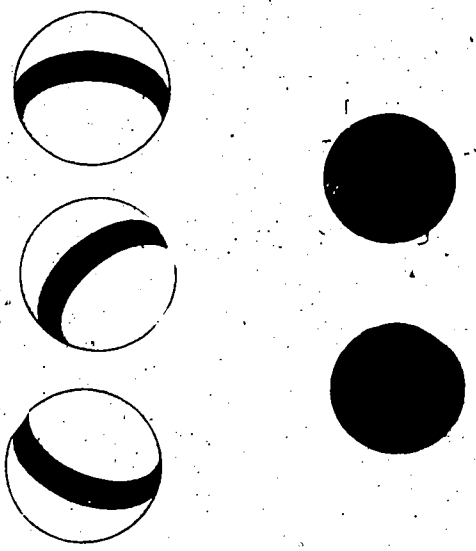
1.

2.

3.

4.

Using Equations



Tom had 3 red balls.

He bought 2 blue balls.

Then how many balls did he have?

3 + 2 =

Tom had 5 balls.

Susan was playing house.

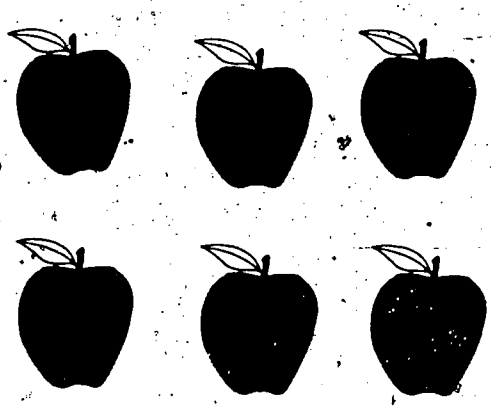
Betty and Linda came to play with her.

How many girls were playing house?

Six ripe apples were on a tree.

The birds ate two of them.

How many of the apples are still on the tree?

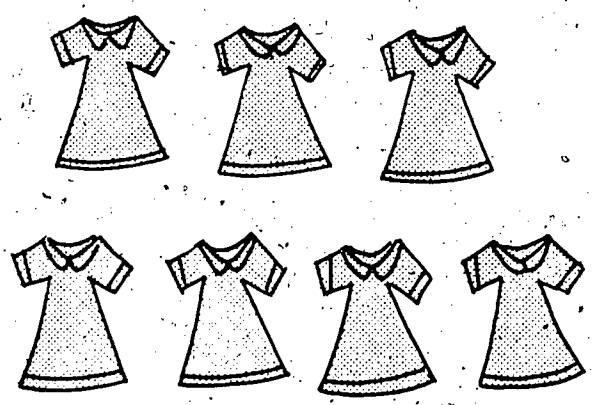


Using Equations

Bill's birthday cake had 6 lighted candles.
Bill blew out 4 of them.
How many candles were burning then?

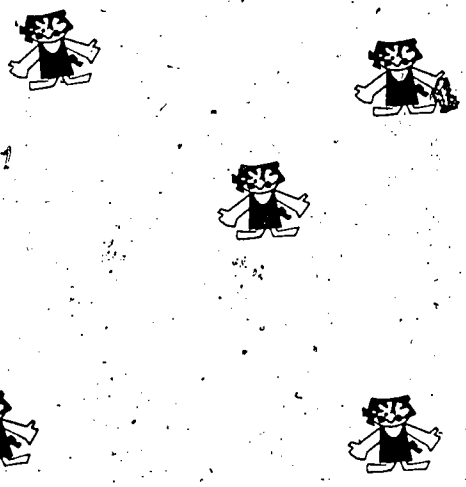
_____

Judy has 7 dresses.
Only one dress is blue.
How many dresses are not blue?



_____

Beth has 5 dolls.
Jean has 8 dolls.
How many dolls must Beth get to have as many as Jean?



_____

Solving Problems

Peggy has 3 cookies.
Sarah has 6 cookies.
How many more cookies does Sarah have than Peggy?

Draw Peggy's cookies.

Draw Sarah's cookies.

_____

Sarah has _____ more cookies.

Sue has 9 cents.
John has 5 cents.
How many fewer cents does John have than Sue?

Draw Sue's cents.

Draw John's cents.

_____

John has _____ fewer cents.

Solving Problems

Ellen has 8 jacks.
Beth has 4 jacks.
How many jacks must Beth get to have as many as Ellen?

Draw Ellen's jacks.

Draw Beth's jacks.

_____

Beth must get _____ jacks.

Bill has 9 balls.
John has 3 balls.
How many more balls does Bill have than John?

Draw Bill's balls.

Draw John's balls.

_____

Bill has _____ more balls.

Comparing Numbers

$6 > 4$ Six is greater than four.

$4 < 6$ Four is less than six.

Add or subtract. Put in $>$, $<$ or $=$.

$3 + 2 > 4$	$6 = 3 + 3$	$10 - 8 \quad 4$
$6 - 4 \quad 1$	$6 \quad 3 + 1$	$6 + 3 \quad 10$
$3 + 3 \quad 7$	$5 \quad 4 + 2$	$5 \quad 7 - 4$
$2 + 1 \quad 0$	$8 \quad 5 + 4$	$4 \quad 9 - 5$
$4 + 2 \quad 5$	$10 \quad 6 + 3$	$8 \quad 5 + 3$
$2 + 2 \quad 6$	$4 \quad 3 + 4$	$7 + 3 \quad 9$

Comparing Numbers

$7 > 3$ $\quad$ $5 < 9$ $\quad$ $3 + 2 = 4 + 1$

Put in $<$, $>$, or $=$.

$6 + 1 \quad 1 + 6$	$6 + 0 \quad 0 + 0$	$5 + 3 \quad 1 + 7$
$3 + 4 \quad 2 + 4$	$7 - 5 \quad 1 + 1$	$4 + 6 \quad 7 + 2$
$5 + 2 \quad 7 + 0$	$3 + 4 \quad 2 + 5$	$8 - 7 \quad 9 - 9$
$2 + 2 \quad 3 + 3$	$7 - 0 \quad 6 - 4$	$5 + 0 \quad 6 - 3$
$1 + 5 \quad 6 + 1$	$6 + 3 \quad 6 - 3$	$7 + 2 \quad 5 + 3$
$2 + 3 \quad 5 + 0$	$4 + 5 \quad 7 + 2$	$2 + 6 \quad 3 + 7$
$4 + 3 \quad 1 + 3$	$10 - 8 \quad 6 + 2$	$4 + 4 \quad 3 + 5$

Comparing Numbers

Put in + or -.

10 - 5 > 6 4

3 + 7 = 8 2

5 4 > 10 - 2

8 4 < 10 - 4

5 3 = 10 - 2

7 3 > 5 + 4

6 - 2 > 10 7

5 5 = 6 6

9 6 > 5 + 4

3 + 6 < 9 1

10 3 < 4 4

9 2 < 6 4

7 2 > 3 + 5

8 1 < 2 + 6

6 1 > 1 + 5

4 3 = 5 2

1 + 9 > 7 3

2 + 8 < 9 2

Adding Three Numbers

Fill in the blanks.

$(2 + 4) + 1 = \underline{6} + 1$ $= \underline{7}$	$(4 + 5) + 1 = \underline{\quad} + 1$ $= \underline{\quad}$
$(3 + 1) + 2 = \underline{\quad} + 2$ $= \underline{\quad}$	$2 + (4 + 1) = 2 + \underline{\quad}$ $= \underline{\quad}$
$4 + (5 + 1) = 4 + \underline{\quad}$ $= \underline{\quad}$	$5 + (3 + 2) = 5 + \underline{\quad}$ $= \underline{\quad}$
$2 + (4 + 4) = 2 + \underline{\quad}$ $= \underline{\quad}$	$3 + (4 + 2) = 3 + \underline{\quad}$ $= \underline{\quad}$
$(5 + 3) + 2 = \underline{\quad} + 2$ $= \underline{\quad}$	$(1 + 7) + 2 = \underline{\quad} + 2$ $= \underline{\quad}$

Adding Three Numbers

Use (✓). Fill in the blanks.

3 + 4 + 2 = _____ + 2
= _____

2 + 5 + 3 = 2 + _____
= _____

2 + 1 + 6 = _____ + 6
= _____

5 + 1 + 3 = _____ + 3
= _____

5 + 1 + 3 = 5 + _____
= _____

1 + 7 + 2 = _____ + 2
= _____

2 + 5 + 3 = _____ + 3
= _____

3 + 4 + 2 = 3 + _____
= _____

1 + 7 + 2 = 1 + _____
= _____

2 + 1 + 6 = 2 + _____
= _____

Adding Three Numbers

Find the sums. Start at the top. Write your answer.

3	6	4	7	3	3
5	1	1	1	7	5
1	2	5	2	0	2

2	1	3	2	8	4
4	7	2	4	1	5
3	2	4	4	1	1

3	2	2	1	2	1
3	7	3	6	2	4
3	1	5	3	3	3

Think about the sums again.

Start at the bottom this time.

Solving Problems

Write the equation on the dark line.

Write the answer on the dotted lines.

1. Mary saw 4 cookies on a plate.
   Her mother said that there should be 9 cookies on the plate.
   How many more cookies must Mary get?

   _____

   _____

   _____

2. Linda and Betty have 8 dolls.
   Linda has 5 dolls.
   How many dolls does Betty have?

   _____

   _____

   _____

3. There are 6 pencils on the desk.
   Ann's teacher needs 10 pencils.
   How many more should Ann get for her?

   _____

   _____

   _____

Solving Problems

4. Joe saw a kite in a toy store.

   The kite cost 10 cents.

   Joe has only 3 cents.

   How much more money does he need to buy the kite?

   _____

   _____

   _____

5. There are 7 reading books and 2 science books on the table.

   How many reading and science books are on the table?

   _____

   _____

   _____

6. Pat saw 10 airplanes on the ground at the airport.

   Eight of these airplanes took off.

   How many of these airplanes were still on the ground?

   _____

   _____

   _____

7. Tom had 7 lighted candles on his birthday cake.
He blew out 7 of them.
How many of the candles on his birthday cake were still lighted?

_____

_____

_____

8. There were 8 children playing tag.
Four of them were girls.
How many were boys?

_____

_____

_____

9. Sue picked 8 flowers from the garden.
Mother wants 10 flowers.
How many more flowers must Sue pick for Mother?

_____

_____

_____

Problem Solving:

Complete the sentence.

1. Dick had 7 balls.
   He gave some of his balls to Sam.
   How many balls did Dick have then?

I could tell if I knew how many balls _____.

2. Mother gave 3 cookies to Bob.
   She gave some cookies to Sue.
   How many cookies did Bob and Sue have?

I could tell if I knew how many cookies _____.

3. Sally has 2 doll dresses.
   Peggy has 4 doll dresses.
   How many doll dresses do Sally and Beth have all together?

I could tell if I knew how many doll dresses _____.

4. Joe saw some ducks on a pond.
   Three of these ducks flew away.
   Then how many of these ducks were on the pond?

I could tell if I knew how many ducks _____.

Solving Problems

Draw lines under the facts you use to solve the problem.

Father has 4 hats.
He has 3 coats.
Father has 1 brown hat.
His other hats are black.
How many black hats does Father have?

_____
Father has
_____ black hats.

Jimmy has some new books.
Father gave 3 of these books to Jimmy.
Mother gave 4 cars to Jimmy.
Grandmother gave 4 of these books to Jimmy.
How many books does Jimmy have?

_____
Jimmy has
_____ new books.

Jane has 6 candy canes.
She has 4 candy suckers.
She gives 3 of the canes to David.
She gives 2 of the suckers to David.
How many canes does Jane have now?

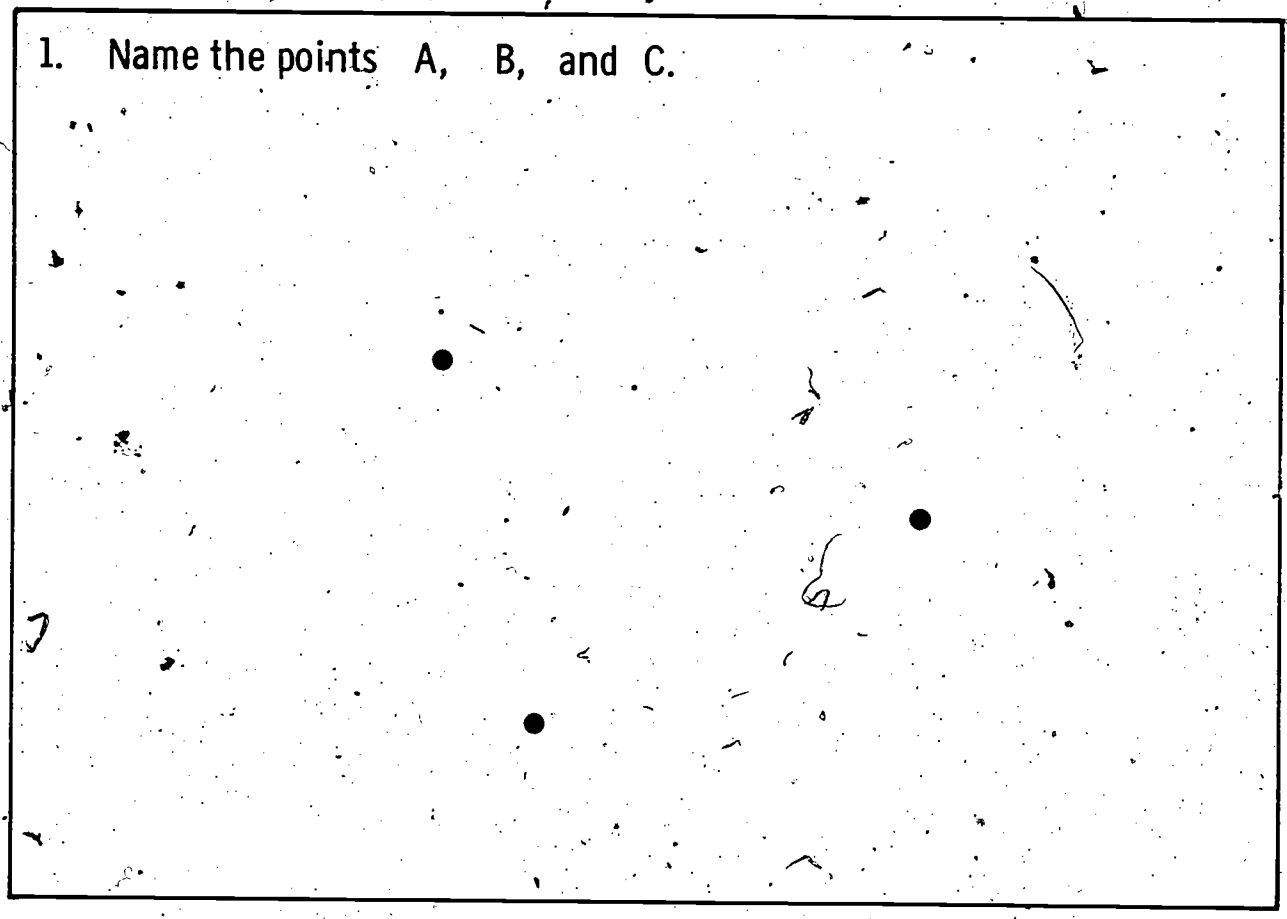
_____
Jane has
_____ candy canes.

Four little boys went swimming.
Two mothers went swimming.
Three fathers went swimming.
Five little girls went swimming.
How many children went swimming?

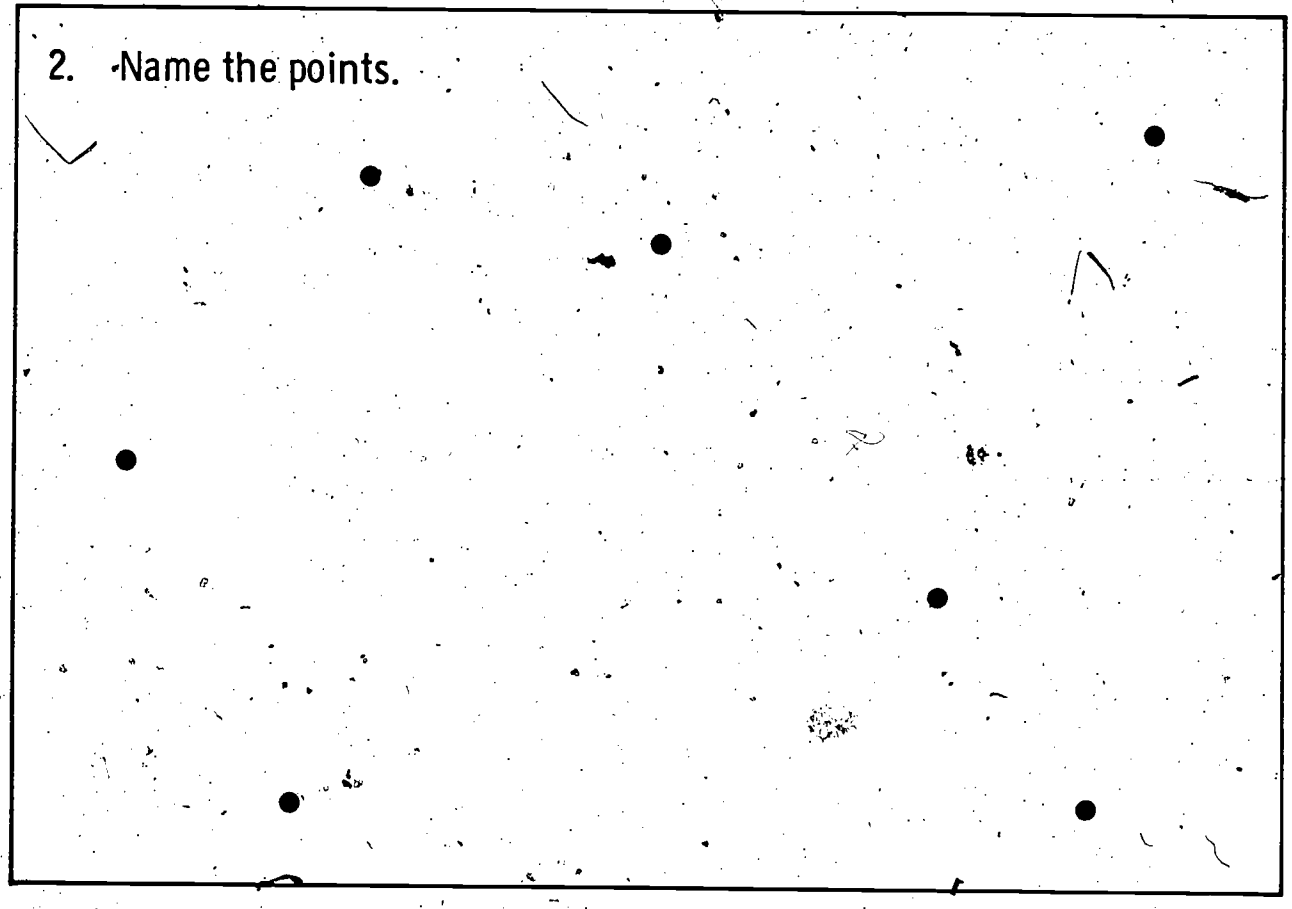
_____
_____ children
are swimming.

Points

1. Name the points A, B, and C.



2. Name the points.



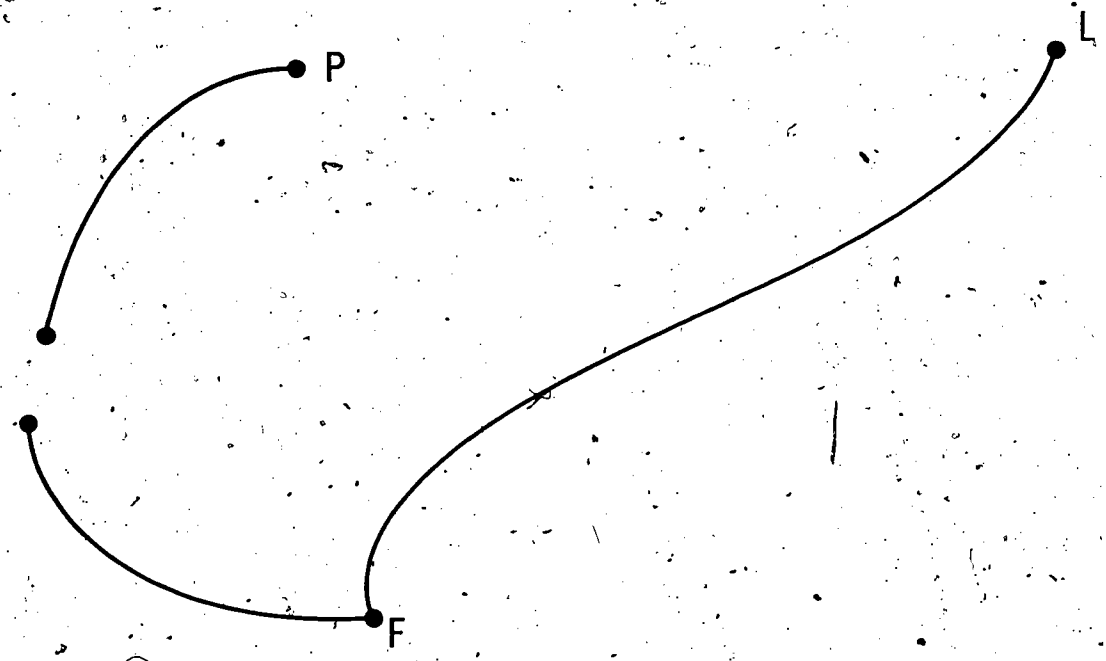
Put a ring around the answer:

Is there a curve shown going from F to L? Yes No

Is there a curve shown going from F to P? Yes No

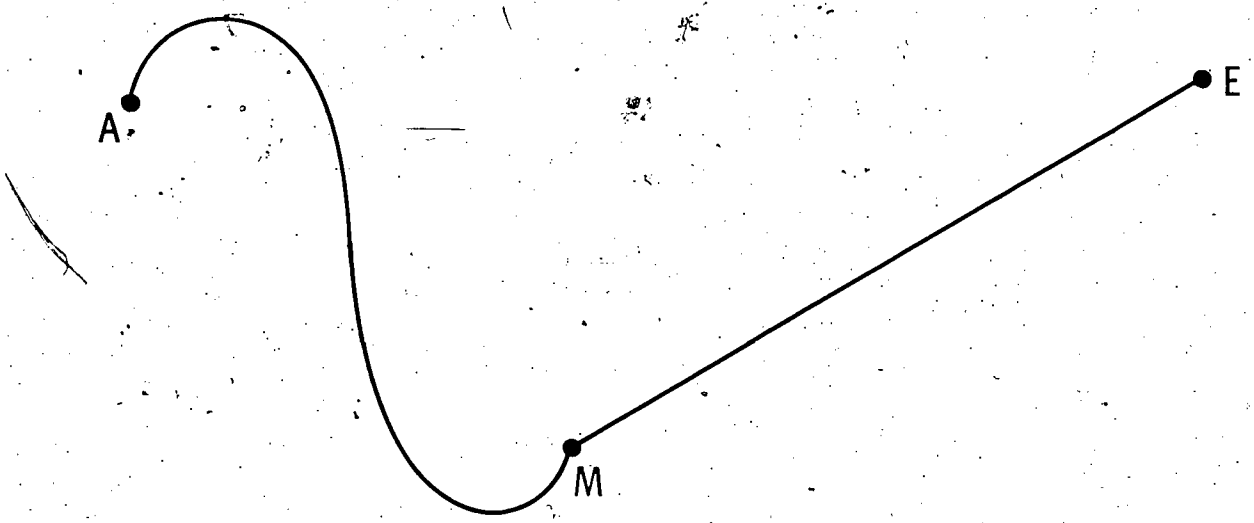
Mark another point on the curve from F to L. Name it H.

Draw a curve from P to H.



Is there a curve shown going from A to M? Yes No

Is there a curve shown going from M to E? Yes No



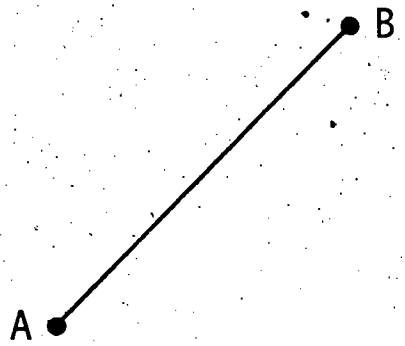
Is there a line segment shown going from M to E? Yes No

Name its endpoints. _____ _____

Is there a line segment shown going from A to M? Yes No

Line Segments

1. Here is a picture of a line segment.



One name for this line segment is _____.

Another name for the line segment is _____.

2. Here is another line segment.

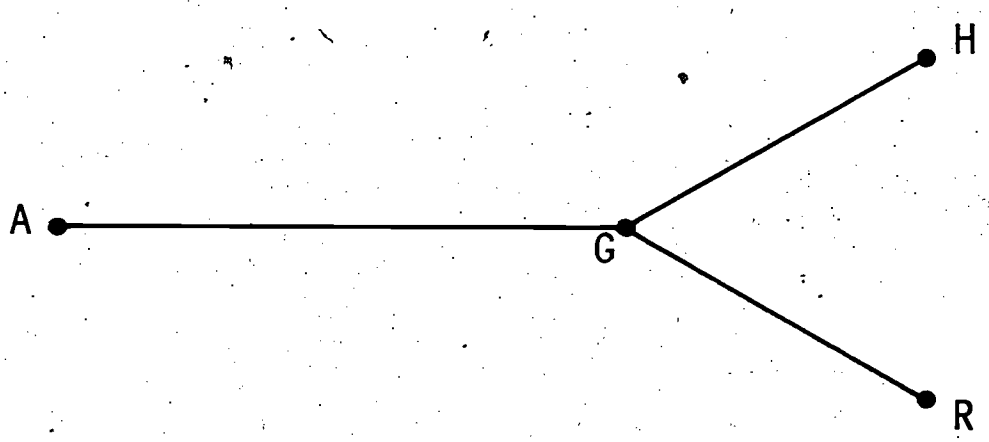
Name one endpoint C.

Name the other endpoint D.

Write two names for this line segment. _____ _____

Line Segments

3. Here are some line segments that have G as an endpoint.



Name three different line segments shown.

_____ _____ _____

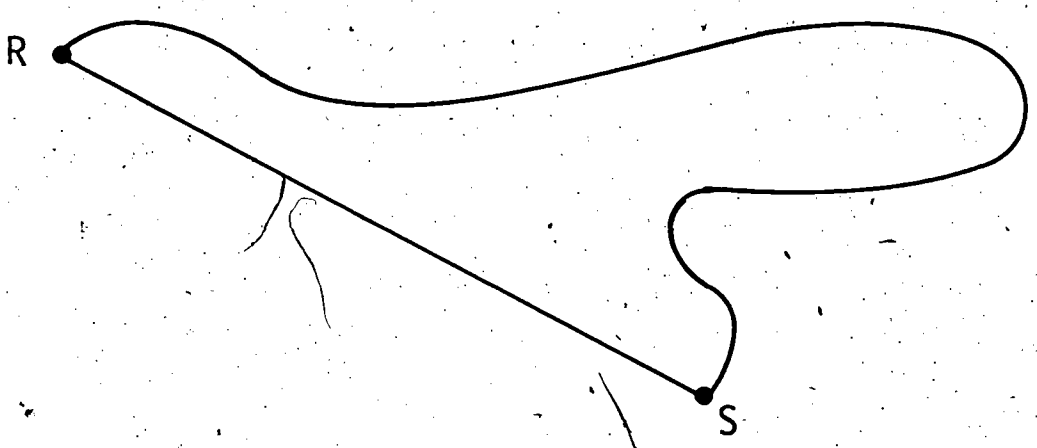
Line Segments

Is there a line segment shown with endpoints R and S? Yes No

Write two names for this line segment. _____ _____

Can there be another line segment with endpoints R and S?

Yes No



Mark another point on $\overline{RS}$. Name it B.

Is the line segment $\overline{RB}$ shown? Yes No

Is the line segment $\overline{SB}$ shown? Yes No

1. Draw four different lines through the point K.

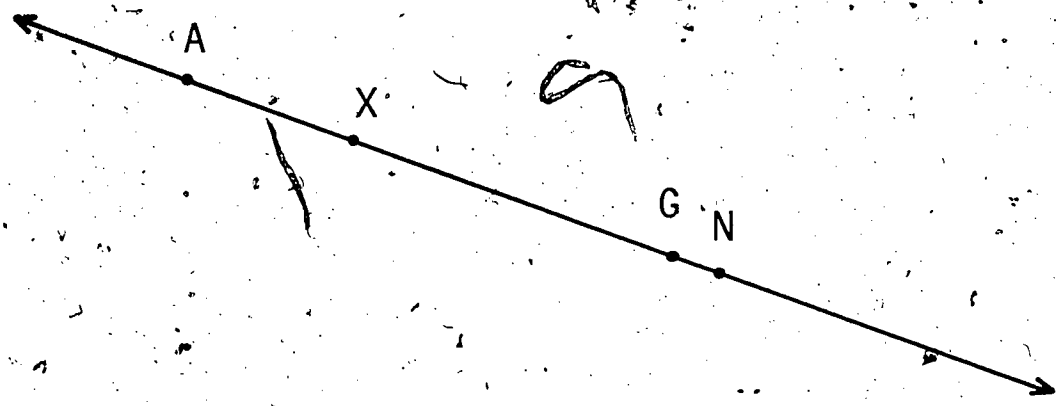
2. Draw a line through the points H and S.

Name this line _____

Could you draw a different line through H and S? Yes No

3. Line $\overleftrightarrow{AG}$ is shown below.

Write four more names for this line. _____ _____ _____ _____



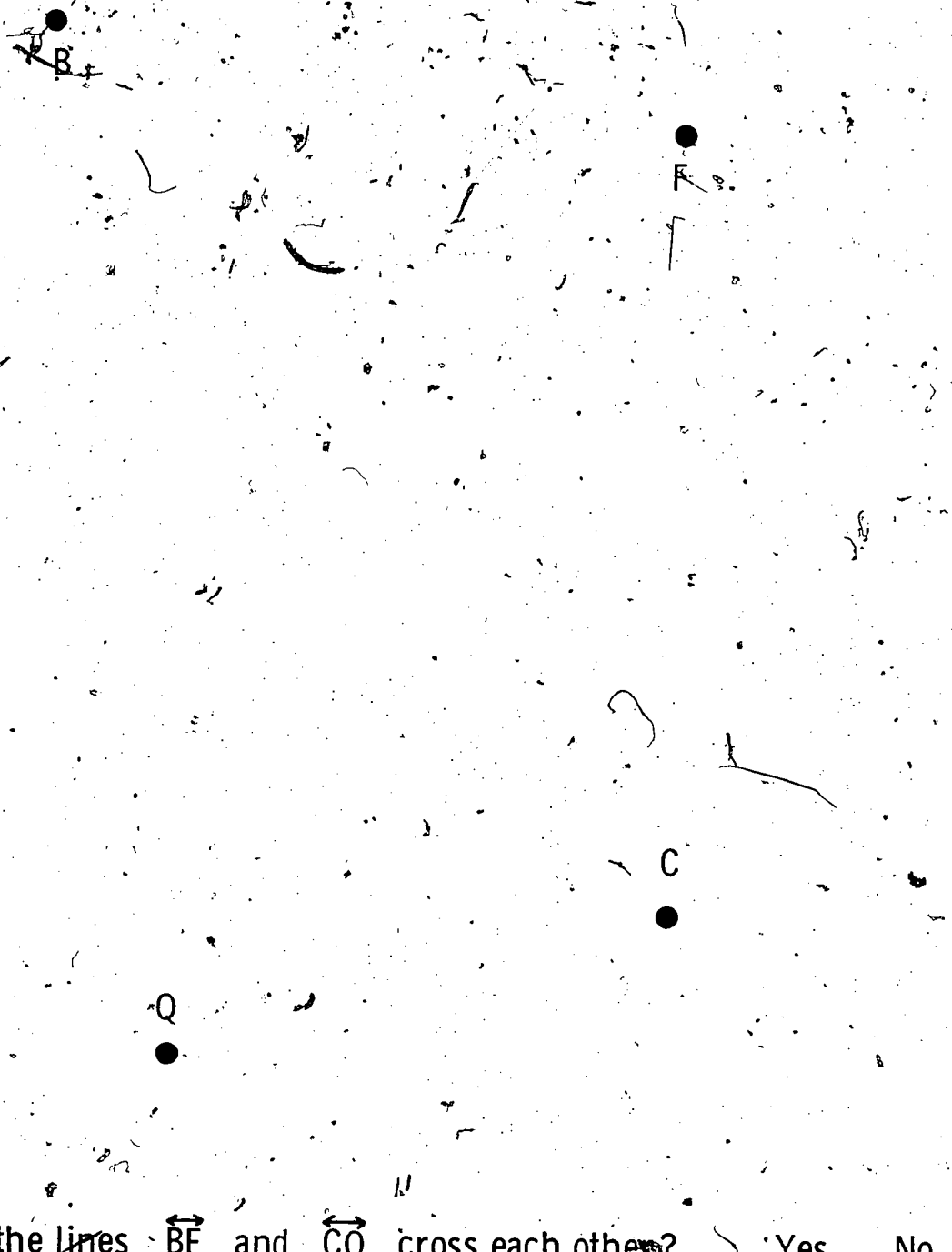
Is line segment $\overline{AG}$ part of line $\overleftrightarrow{AG}$? Yes No

Is $\overline{AG}$ part of $\overline{XN}$? Yes No

Is $\overline{AG}$ part of $\overleftrightarrow{XN}$? Yes No

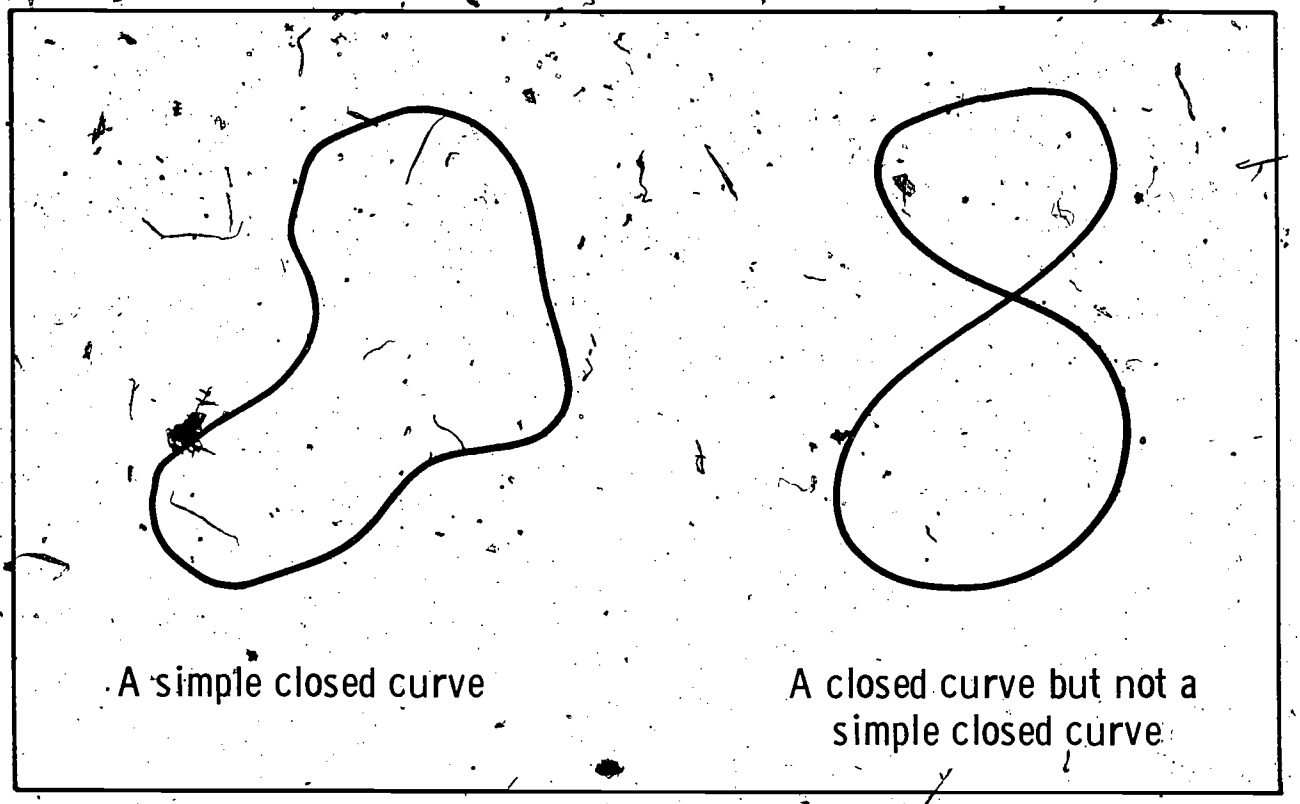
4. Draw line segments $\overline{BF}$ and $\overline{CQ}$.

Do they cross each other? Yes No



Do the lines $\overleftrightarrow{BF}$ and $\overleftrightarrow{CQ}$ cross each other? Yes No

Closed Curves



A simple closed curve

A closed curve but not a simple closed curve

1. Draw a simple closed curve.

2. Draw a closed curve that is not a simple closed curve.

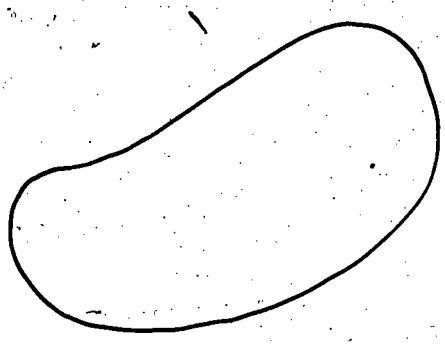
Closed Curves

With a red crayon, trace each simple closed curve.

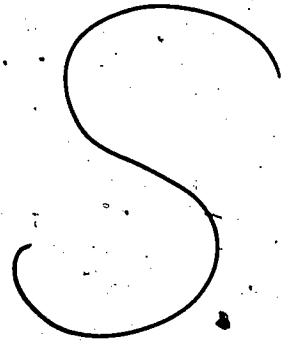
With a blue crayon, trace each closed curve that is not a simple closed curve.

With a green crayon, trace each curve that is not closed.

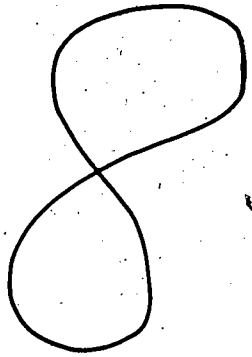
1.



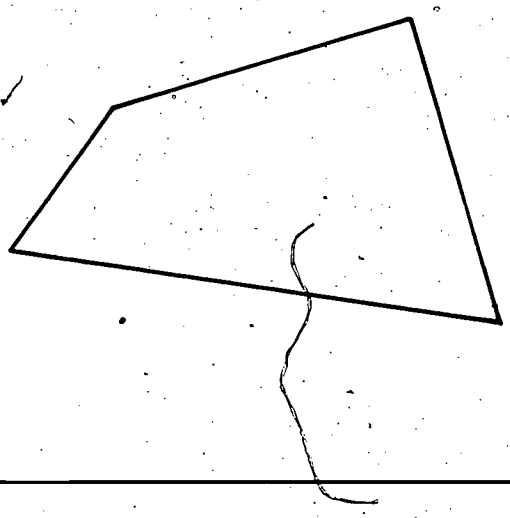
2.



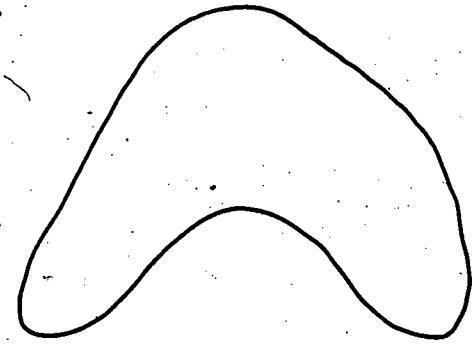
3.



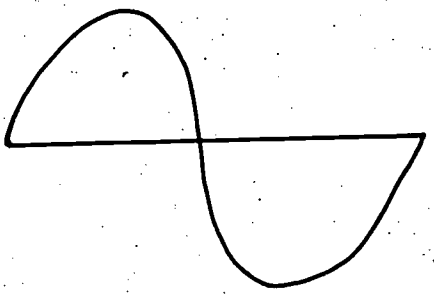
4.



5.



6.

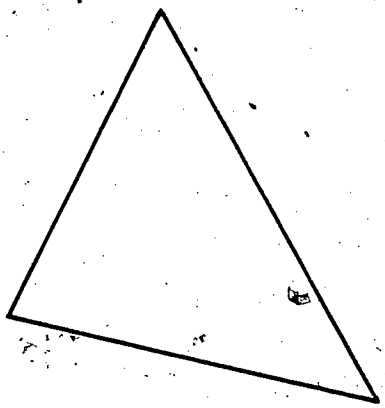


Closed Curves

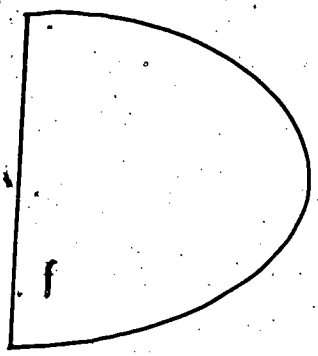
With a red crayon, trace each polygon.

With a blue crayon, trace each simple closed curve that is not a polygon.

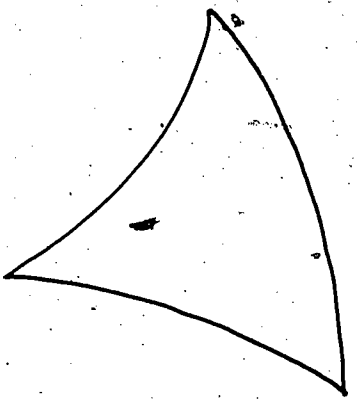
1.



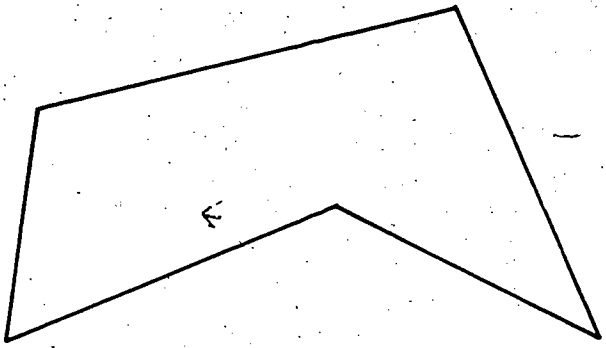
2.



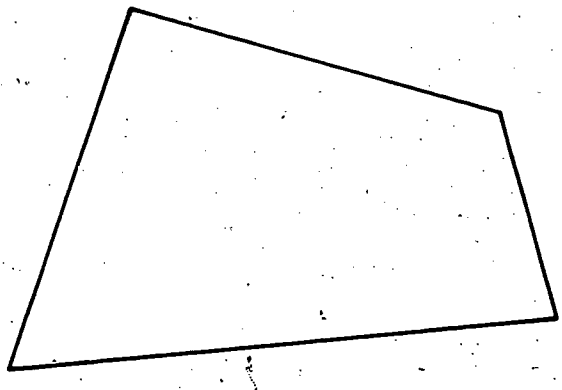
3.



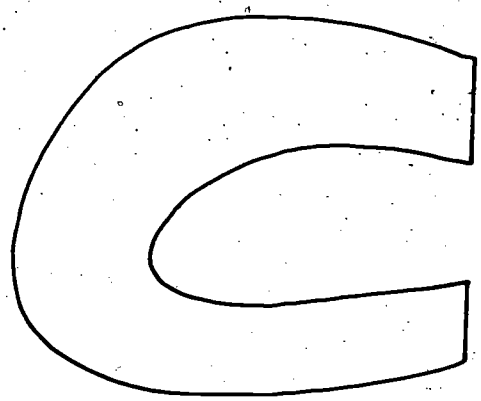
4.



5.



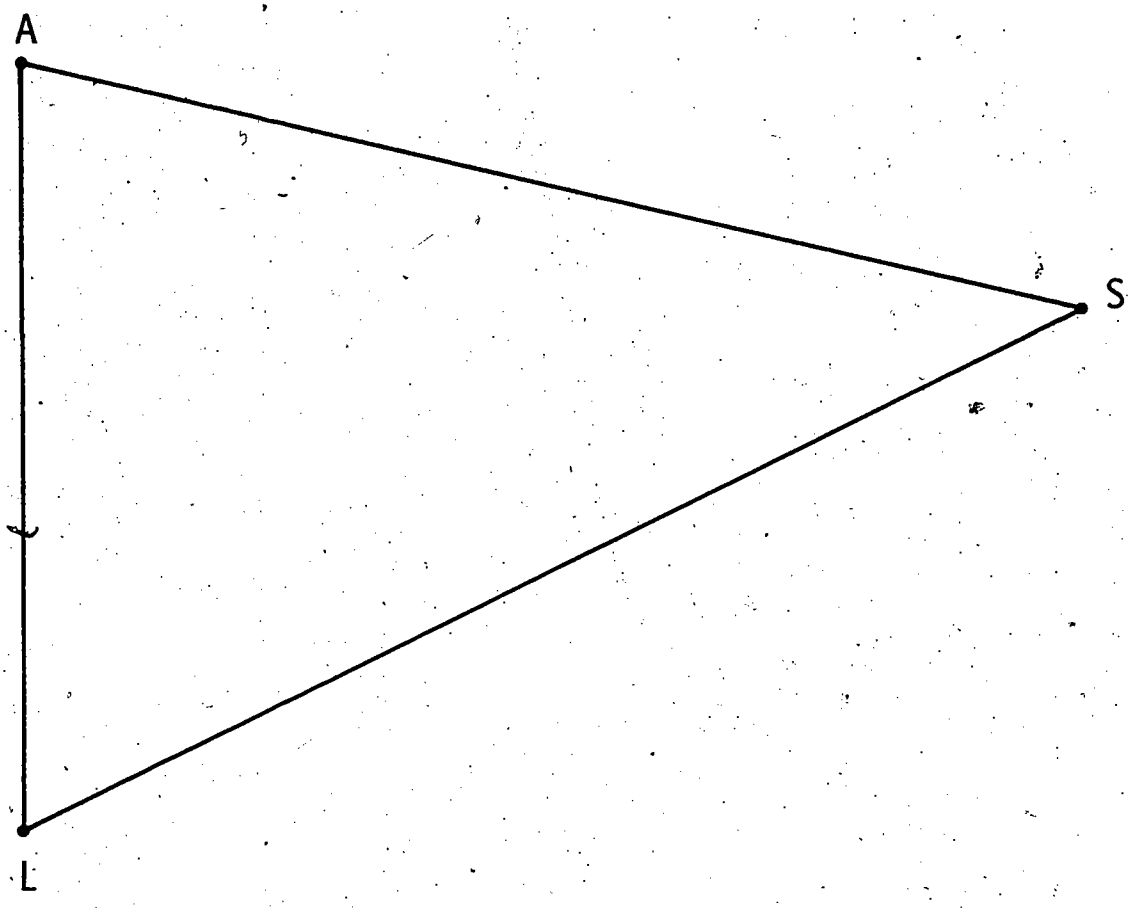
6.



1. Here is a triangle, $\triangle ASL$.

   One vertex is A.

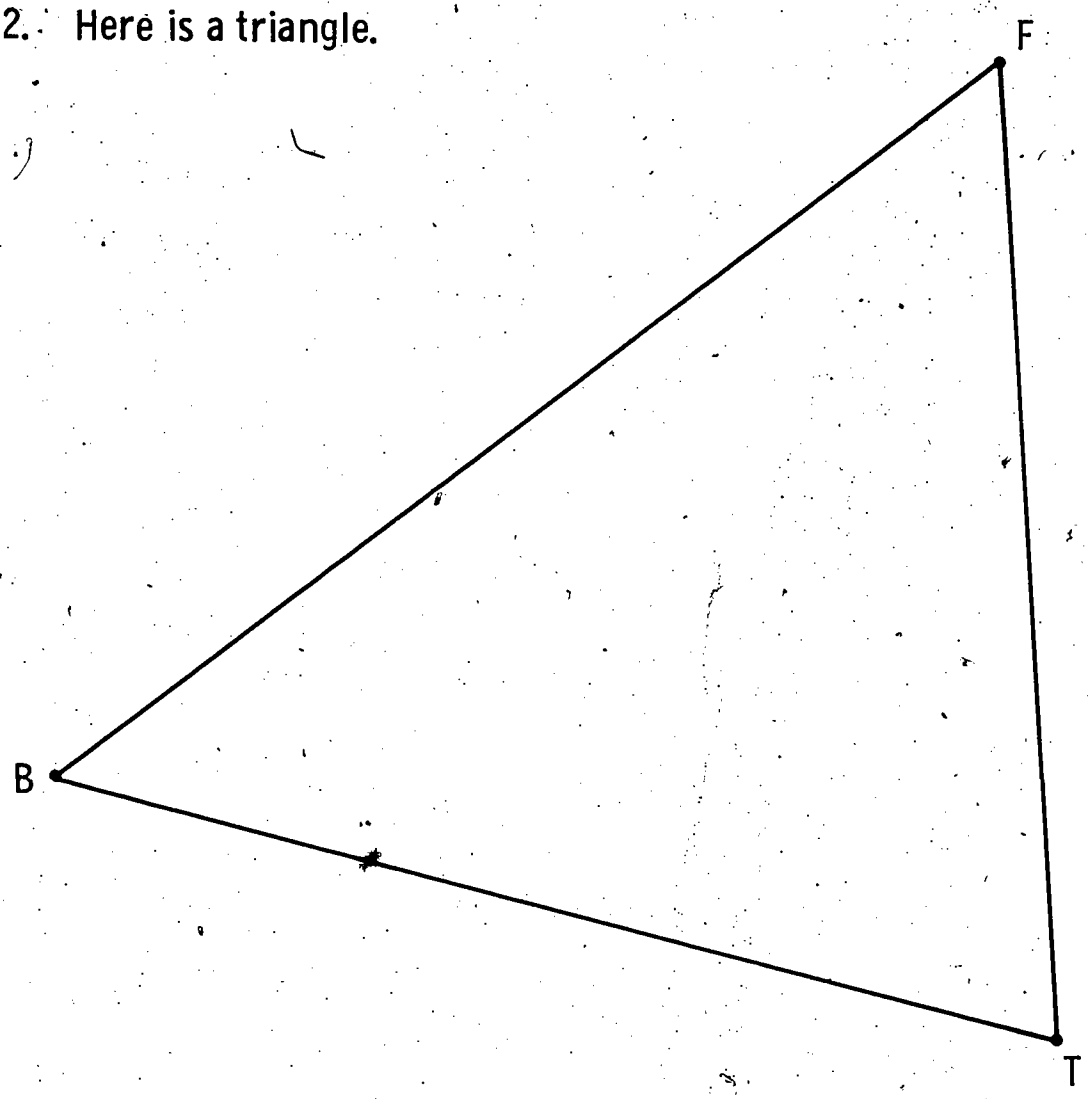
   One side is $\overline{AS}$.



The vertices are A, _____, _____

The sides are $\overline{AS}$, _____, _____

2. Here is a triangle.

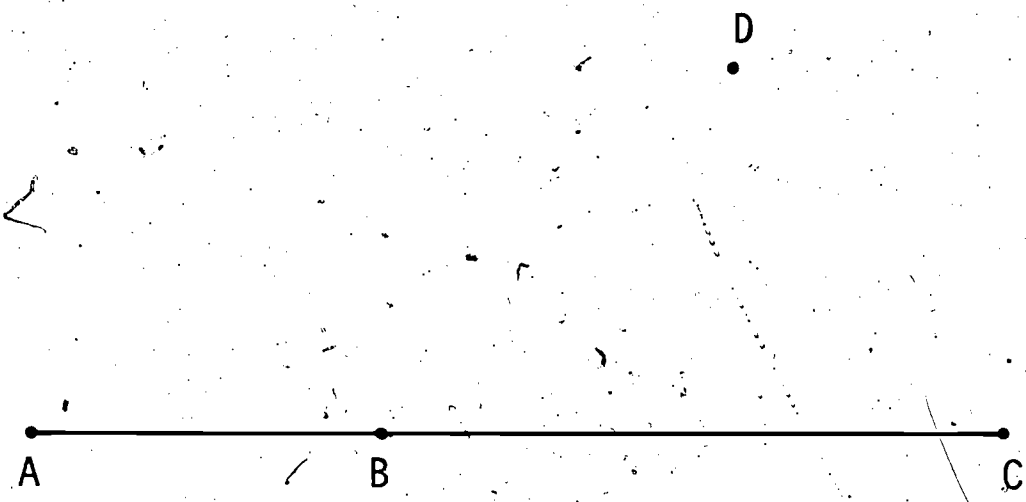


Name the vertices. _____ _____ _____

Name the sides. _____ _____ _____

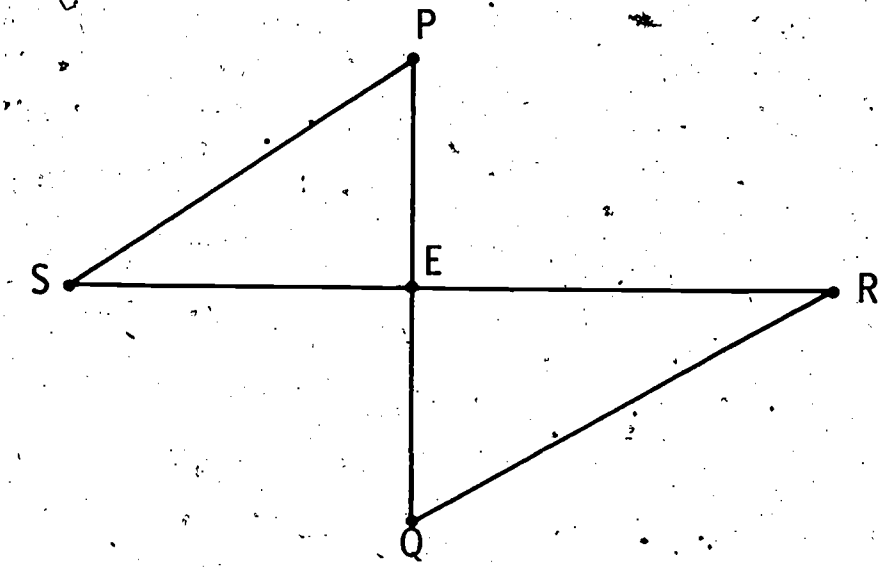
Name the triangle. _____

3. The points A, B, and C lie on a line.
   Draw $\overline{DA}$, $\overline{DB}$, and $\overline{DC}$.



Name all the triangles drawn. _____ _____ _____

4. $\overline{PQ}$ and $\overline{RS}$ are line segments meeting at the point E.

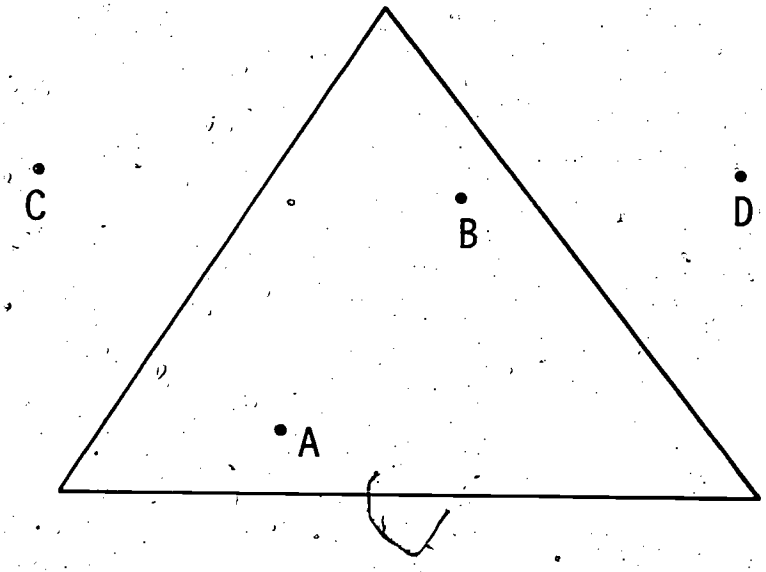


Name the triangles drawn. _____ _____

Draw the line segment $\overline{PR}$.

Name the new triangles drawn. _____ _____ _____

5. Draw a curve from A to B that does not cross the triangle.
   Draw a curve from C to D that does not cross the triangle.

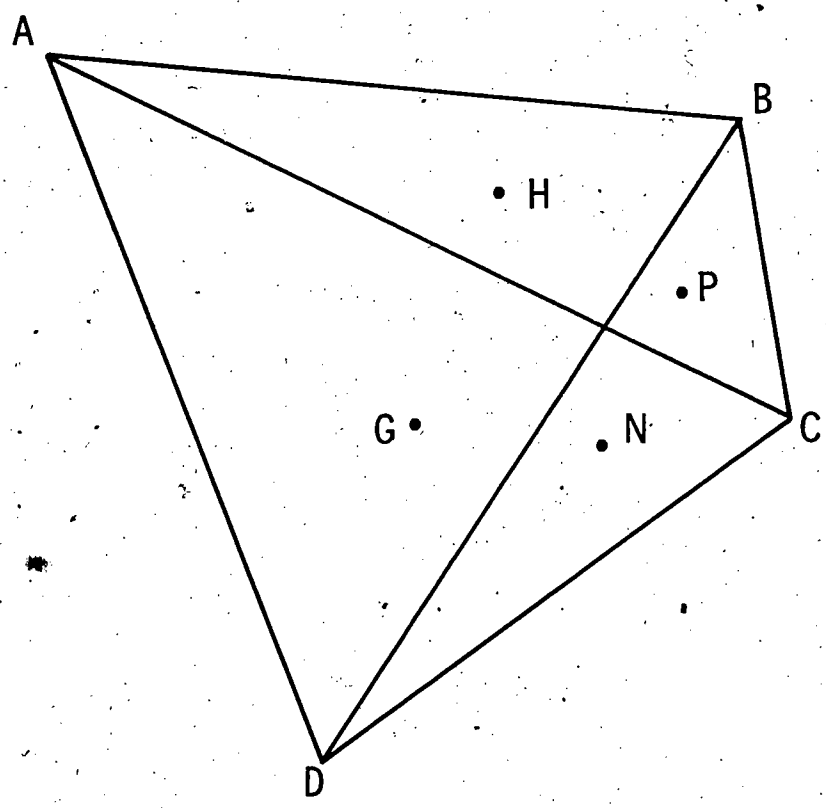


Points A and B are inside / outside the triangle.

Points C and D are inside / outside the triangle.

Can you draw a curve from A to C that does not cross the triangle? Yes No

6.



Name the marked point inside △ABC and inside △DBC. _____

Name the marked point outside △ABC and outside △DBC. _____

Name the marked point inside △ABC but outside △DBC. _____

Name the marked point outside △ABC but inside △DBC. _____

Other Names for Numbers
Fill the blanks.

32	3 tens and 2 ones	30 + 2
14	_____ tens and _____ ones	_____ + _____
27	_____ tens and _____ ones	_____ + _____
43	_____ tens and _____ ones	_____ + _____
55	_____ tens and _____ ones	_____ + _____
47	_____ tens and _____ ones	_____ + _____
24	_____ tens and _____ ones	_____ + _____
38	_____ tens and _____ ones	_____ + _____
90	_____ tens and _____ ones	_____ + _____
56	_____ tens and _____ ones	_____ + _____
72	_____ tens and _____ ones	_____ + _____

Other Names for Numbers

Fill the blanks.

46 = 40 + 6	20 + 3 = 23
52 = 50 + 2	90 + 6 = _____
27 = _____ + _____	40 + 5 = _____
89 = _____ + _____	70 + 2 = _____
73 = _____ + _____	30 + 8 = _____
61 = _____ + _____	50 + 7 = _____
30 = _____ + _____	10 + 8 = _____
95 = _____ + _____	60 + 9 = _____
14 = _____ + _____	80 + 4 = _____
28 = _____ + _____	70 + 0 = _____

Renaming and Using Basic Facts

Fill the blanks.

35 + 2 = _____ + 5 + 2 35 + 2 = 30 + _____ 35 + 2 = _____	41 + 8 = _____ + 1 + 8 41 + 8 = 40 + _____ 41 + 8 = _____
93 + 6 = _____ + 3 + 6 93 + 6 = 90 + _____ 93 + 6 = _____	85 + 4 = _____ + 5 + 4 85 + 4 = 80 + _____ 85 + 4 = _____
52 + 7 = _____ + 2 + 7 52 + 7 = 50 + _____ 52 + 7 = _____	26 + 2 = _____ + 6 + 2 26 + 2 = 20 + _____ 26 + 2 = _____
16 + 3 = _____ + 6 + 3 16 + 3 = 10 + _____ 16 + 3 = _____	77 + 2 = _____ + 7 + 2 77 + 2 = 70 + _____ 77 + 2 = _____
32 + 4 = _____ + 2 + 4 32 + 4 = 30 + _____ 32 + 4 = _____	53 + 5 = _____ + 3 + 5 53 + 5 = 50 + _____ 53 + 5 = _____

Addition

32 + 7 = _____

Rename 32: 30 + 2

Add 7: 7

30 + 9 Write 39 to complete the equation.

Fill the blanks.

25 + 4 = 29 20 + 5 4 20+9	76 + 3 = _____ 70 + 6 3	81 + 6 = _____ 80 + 1 6
55 + 2 = _____ 50 + 5 2	13 + 5 = _____ 10 + 3 5	98 + 1 = _____ 90 + 8 1
62 + 4 = _____ 60 + 2 4	74 + 3 = _____ 70 + 4 3	23 + 2 = _____ 20 + 3 2

Addition

Rename, add, and fill the blank.

45 + 1 = _____ 40 + 5 _____1	14 + 2 = _____	91 + 3 = _____
52 + 5 = _____	31 + 8 = _____	87 + 2 = _____
21 + 5 = _____	73 + 4 = _____	54 + 5 = _____
42 + 6 = _____	84 + 4 = _____	32 + 3 = _____

Subtraction

19 - 4 = 15 10 + 9 - 4 10+5	82 - 2 = _____ 80 + 2 - 2	36 - 3 = _____ 30 + 6 - 3
44 - 1 = _____ 40 + 4 - 1	68 - 5 = _____ 60 + 8 - 5	97 - 6 = _____ 90 + 7 - 6
23 - 2 = _____ 20 + 3 - 2	79 - 3 = _____ 70 + 9 - 3	38 - 6 = _____ 30 + 8 - 6
75 - 3 = _____ 70 + 5 - 3	65 - 4 = _____ 60 + 5 - 4	43 - 3 = _____ 40 + 3 - 3

Subtraction

Rename, subtract, and fill the blank.

57 - 5 = _____ 50 + 7 - 5 _____	98 - 3 = _____	89 - 7 = _____
24 - 4 = _____	18 - 2 = _____	79 - 5 = _____
56 - 2 = _____	84 - 3 = _____	75 - 2 = _____
46 - 6 = _____	37 - 4 = _____	38 - 5 = _____

Adding Tens

Fill the blanks.

4 tens and 5 tens are _____ tens.

40 + 50 = _____

3 tens and 2 tens are _____ tens.

30 + 20 = _____

7 tens and 1 ten are _____ tens.

70 + 10 = _____

6 tens and 3 tens are _____ tens.

60 + 30 = _____

2 tens and 5 tens are _____ tens.

20 + 50 = _____

5 tens and 3 tens are _____ tens.

50 + 30 = _____

1 ten and 6 tens are _____ tens.

10 + 60 = _____

20 + 20 = _____

60 + 10 = _____

50 + 40 = _____

40 + 30 = _____

70 + 20 = _____

30 + 60 = _____

20 + 40 = _____

50 + 10 = _____

40 + 40 = _____

20 + 70 = _____

10 + 50 = _____

60 + 20 = _____

40 + 50 = _____

20 + 60 = _____

Removing and Subtracting Tens

Fill the blanks.

Start with 9 tens. Remove 4 tens. There are _____ tens in the set remaining.

90 - 40 = _____

Start with 7 tens. Remove 2 tens. There are _____ tens in the set remaining.

70 - 20 = _____

Start with 8 tens. Remove 6 tens. There are _____ tens in the set remaining.

80 - 60 = _____

60 - 30 = _____	60 - 10 = _____	80 - 30 = _____
80 - 20 = _____	60 - 40 = _____	50 - 20 = _____
90 - 50 = _____	90 - 30 = _____	20 - 10 = _____
60 - 50 = _____	80 - 10 = _____	70 - 60 = _____
90 - 70 = _____	70 - 40 = _____	40 - 20 = _____
80 - 40 = _____	90 - 20 = _____	50 - 40 = _____

Sums of Numbers

63 + 20 = _____ 60 + 3 20 _____	45 + 30 = _____ 40 + 5 30 _____	70 + 18 = _____ 70 10 + 8 _____
39 + 60 = _____	14 + 40 = _____	56 + 30 = _____
82 + 10 = _____	60 + 15 = _____	50 + 48 = _____
10 + 56 = _____	40 + 53 = _____	64 + 30 = _____

Subtraction

76 - 50 = 26 70 + 6 -50 20+6	43 - 10 = _____ 40 + 3 -10	59 - 40 = _____ 50 + 9 -40
31 - 30 = _____	98 - 60 = _____	24 - 10 = _____
65 - 50 = _____	58 - 30 = _____	64 - 40 = _____
16 - 10 = _____	87 - 50 = _____	97 - 70 = _____

Practice in Addition

74 + 15 = 89 70 + 4 10 + 5 80+9	12 + 45 = _____ 10 + 2 40 + 5
36 + 61 = _____	63 + 24 = _____
57 + 12 = _____	81 + 16 = _____
58 + 30 = _____	75 + 22 = _____

Subtraction

68 - 56 = 12 60 + 8 -(50 + 6) 10+2	45 - 24 = _____ 40 + 5 (20 + 4)
83 - 51 = _____ 80 + 3 -(50 + 1)	31 - 21 = _____ 30 + 1 -(20 + 1)
59 - 54 = _____	76 - 42 = _____
27 - 15 = _____	12 - 12 = _____

Subtraction

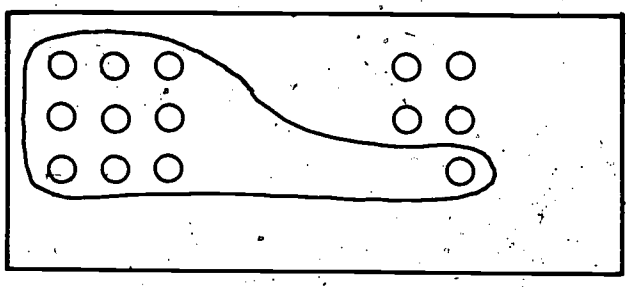
99 - 53 = _____ 90 + 9 -(50 + 3) _____	44 - 13 = _____ 40 + 4 -(10 + 3) _____
86 - 43 = _____	57 - 34 = _____
78 - 27 = _____	65 - 42 = _____
75 - 22 = _____	87 - 17 = _____

Practice with Addition and Subtraction

32 + 51 = _____	83 + 13 = _____
45 - 24 = _____	89 - 72 = _____
57 - 25 = _____	66 + 32 = _____
46 - 16 = _____	93 - 71 = _____

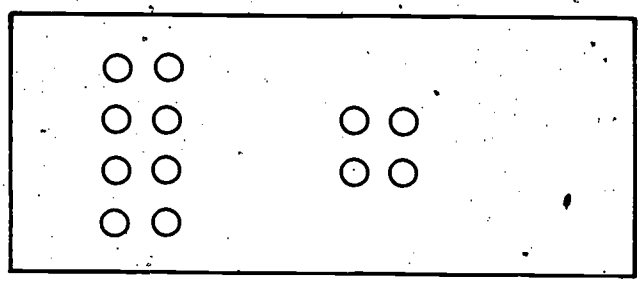
Using Ten in Addition

Ring ten. Fill the blanks.



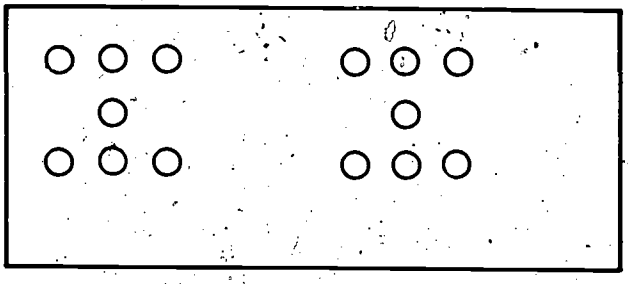
9 + 5 = 10 + ____

9 + 5 = ____



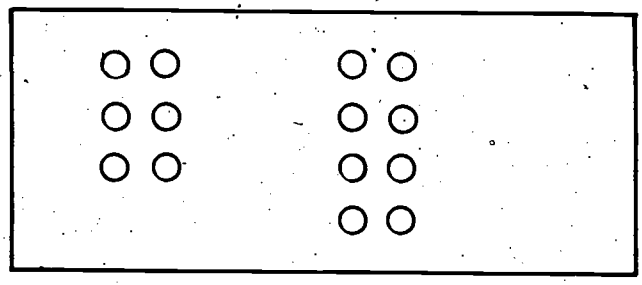
8 + 4 = 10 + ____

8 + 4 = ____



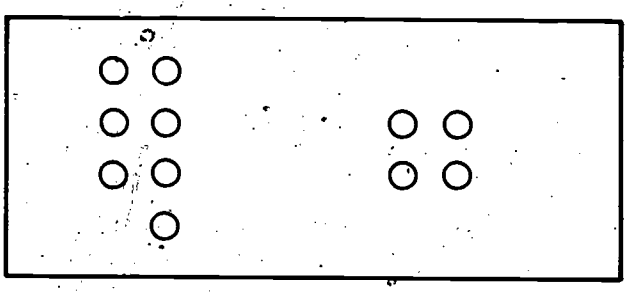
7 + 7 = 10 + ____

7 + 7 = ____



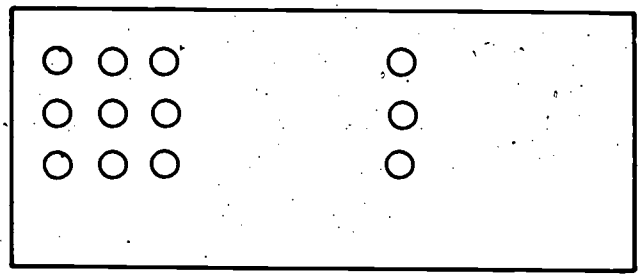
6 + 8 = 10 + ____

6 + 8 = ____



7 + 4 = 10 + ____

7 + 4 = ____

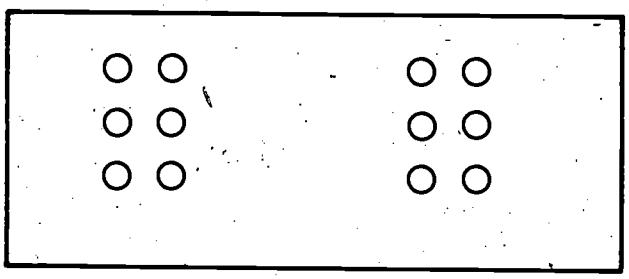


9 + 3 = 10 + ____

9 + 3 = ____

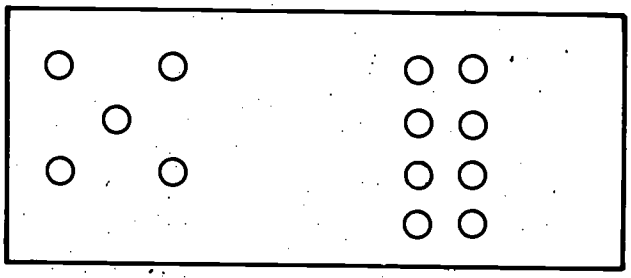
Using Ten in Addition

Ring ten. Fill the blanks.



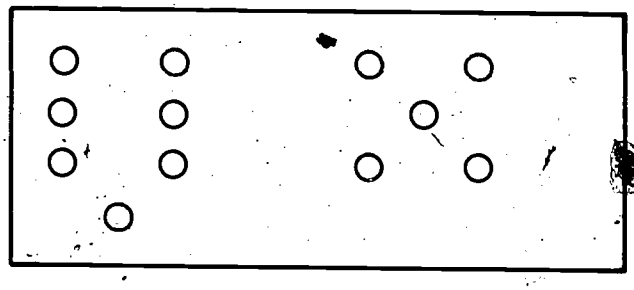
6 + 6 = 10 + _____

6 + 6 = _____



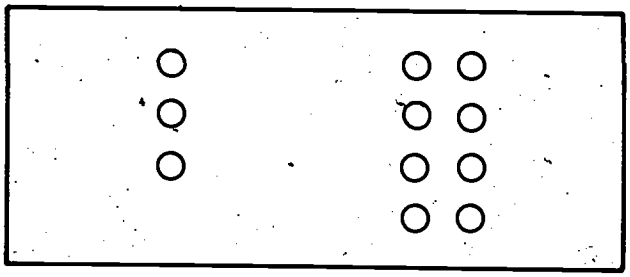
5 + 8 = 10 + _____

5 + 8 = _____



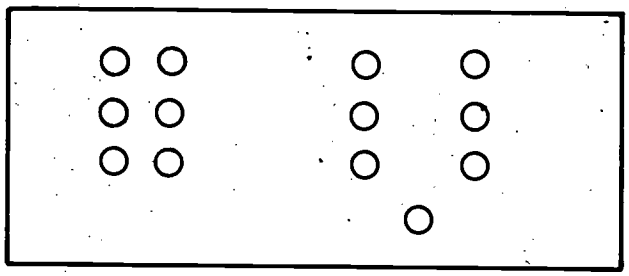
7 + 5 = 10 + _____

7 + 5 = _____



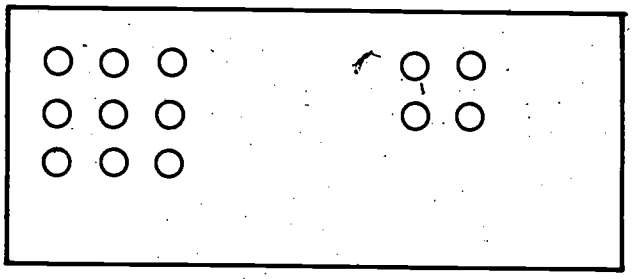
3 + 8 = 10 + _____

3 + 8 = _____



6 + 7 = 10 + _____

6 + 7 = _____



9 + 4 = 10 + _____

9 + 4 = _____

Partitions of Ten

Fill the blanks.

10 is the sum of
2 and _____
6 and _____
4 and _____
8 and _____
1 and _____
5 and _____
3 and _____
9 and _____
7 and _____

8 + _____ = 10	1 + _____ = 10
5 + _____ = 10	7 + _____ = 10
4 + _____ = 10	6 + _____ = 10
2 + _____ = 10	9 + _____ = 10
10 = _____ + 8	10 = _____ + 3
10 = _____ + 5	10 = _____ + 9
10 = _____ + 7	10 = _____ + 6
10 = _____ + 4	10 = _____ + 1

Adding to Ten

10 + 4 = _____	10 + 6 = _____	10 + 8 = _____
10 + 3 = _____	10 + 9 = _____	10 + 5 = _____
10 + 1 = _____	10 + 7 = _____	10 + 2 = _____

Using 10 in Addition

Fill the blanks.

9 + 4 = 10 + _____
9 + 4 = _____

3 + 8 = 10 + _____
3 + 8 = _____

7 + 5 = 10 + _____
7 + 5 = _____

4 + 9 = 10 + _____
4 + 9 = _____

5 + 6 = 10 + _____
5 + 6 = _____

5 + 8 = 10 + _____
5 + 8 = _____

7 + 4 = 10 + _____
7 + 4 = _____

6 + 7 = 10 + _____
6 + 7 = _____

6 + 8 = 10 + _____
6 + 8 = _____

5 + 9 = 10 + _____
5 + 9 = _____

7 + 6 = 10 + _____
7 + 6 = _____

4 + 7 = 10 + _____
4 + [illegible] = _____

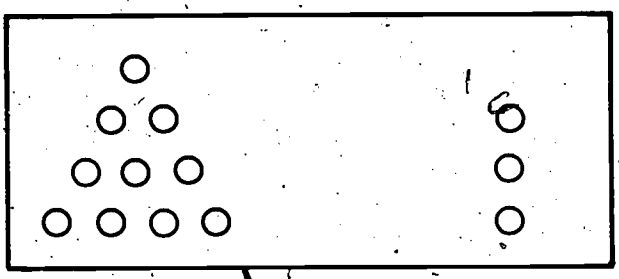
8 + 4 = 10 + _____
8 + 4 = _____

3 + 9 = 10 + _____
3 + 9 = _____

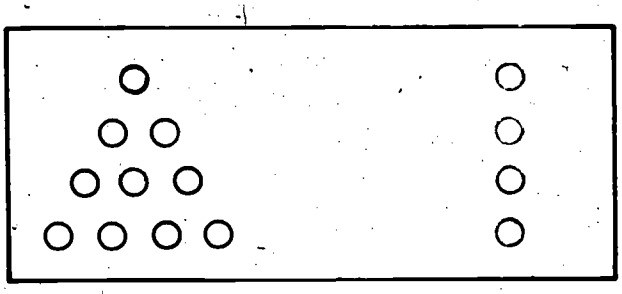
Using 10 in Subtraction

Ring the set you think of removing.

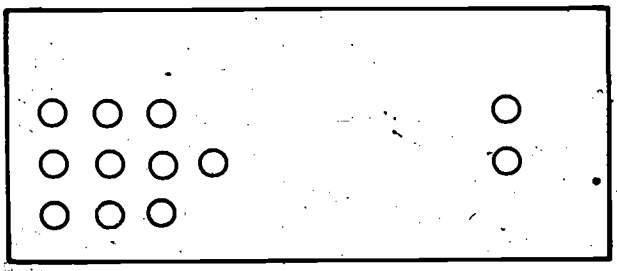
Fill the blanks.



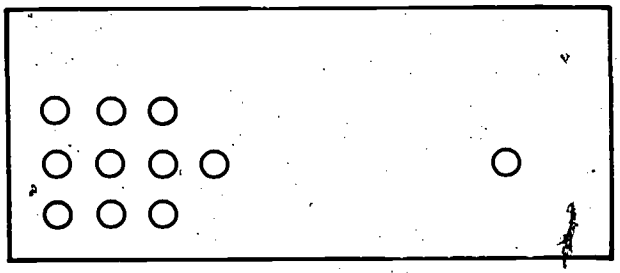
13 - 8 = ____



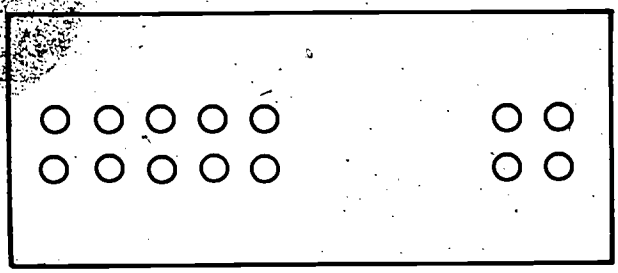
14 - 6 = ____



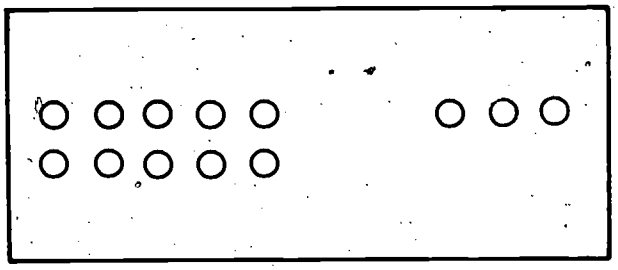
12 - 4 = ____



11 - 2 = ____



14 - 9 = ____

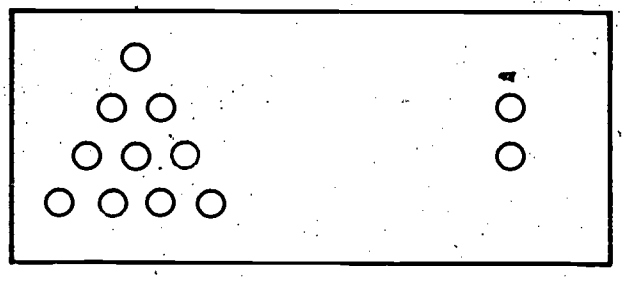


13 - 6 = ____

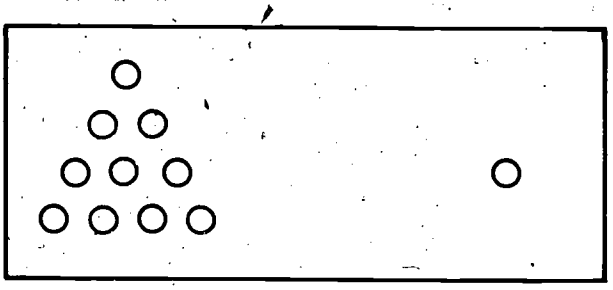
Using 10 in Subtraction

Ring the set you think of removing.

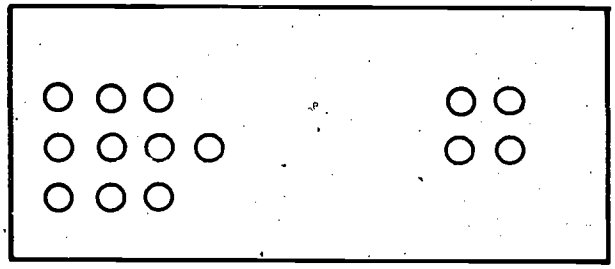
Fill the blanks.



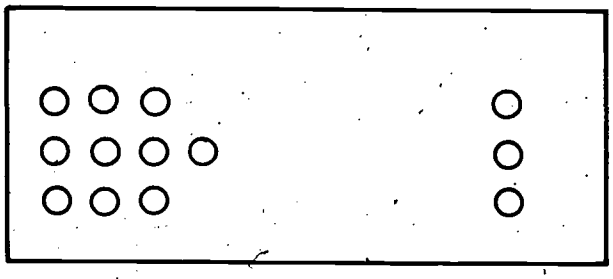
12 - 9 = ____



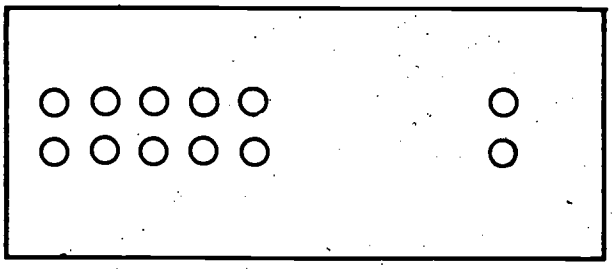
11 - 6 = ____



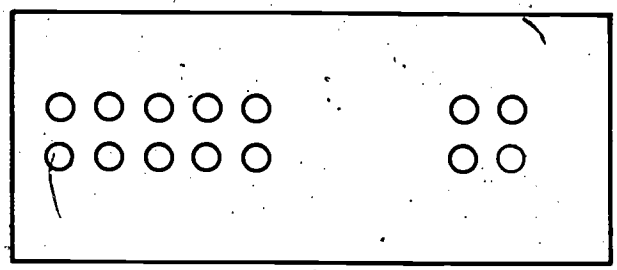
14 - 7 = ____



13 - 5 = ____



12 - 7 = ____



14 - 8 = ____

Partitions, Addition, and Subtraction

11 is the sum of
3 and _____
7 and _____
5 and _____
2 and _____
8 and _____
4 and _____
6 and _____
9 and _____

5 + 5 = _____

5 + 6 = _____

5 + 7 = _____

6 + 6 = _____

6 + 5 = _____

10 - 5 = _____

11 - 5 = _____

10 - 6 = _____

11 - 6 = _____

12 is the sum of
8 and _____
5 and _____
9 and _____
4 and _____
7 and _____
3 and _____
6 and _____

10 - 8 = _____	10 - 3 = _____	12 - 6 = _____
12 - 8 = _____	11 - 3 = _____	11 - 7 = _____
10 - 4 = _____	10 - 7 = _____	12 - 5 = _____
12 - 4 = _____	12 - 7 = _____	4 + _____ = 12
10 - 9 = _____	10 - 5 = _____	7 + _____ = 11
12 - 9 = _____	12 - 3 = _____	3 + _____ = 11

Practice with Basic Facts

Fill the boxes.

+	3	2
5		
7		
9		

+	4	3
8		
6		
4		

+	5	4
7		
5		
6		

4 + _____ = 10 3 + _____ = 11 _____ + 4 = 12

2 + _____ = 12 6 + _____ = 11 _____ + 5 = 12

9 + _____ = 11 7 + _____ = 12 _____ + 8 = 12

Find the sums:

2	4	5	3	4	6
3	4	2	3	2	1
7	4	5	5	6	5

7	9	4	3	2	3
2	1	0	4	4	5
3	2	8	5	5	3

Practice with Basic Facts

13
is the sum of

5 and ____

9 and ____

4 and ____

8 and ____

6 and ____

7 and ____

7 + 3 = _____	12 = 6 + _____	
7 + 6 = _____	13 = 8 + _____	
8 + 5 = _____	11 = 3 + _____	
6 + 7 = _____	12 = 8 + _____	
5 + 8 = _____	11 = 6 + _____	
9 + 4 = _____	13 = 5 + _____	
4 + 9 = _____	12 = 7 + _____	
6 + 6 = _____	13 = 4 + _____	

13 - 4 = _____	12 - 3 = _____	13 - 8 = _____
12 - 8 = _____	13 - 7 = _____	12 - 9 = _____
13 - 6 = _____	12 - 5 = _____	12 - 4 = _____
11 - 6 = _____	11 - 4 = _____	13 - 9 = _____

Write the sums:

5	6	2	2	2	4	2
5	3	4	8	3	5	5
3	4	7	1	8	4	4

Practice with Basic Facts

14 is the sum of
7 and _____
8 and _____
5 and _____
9 and _____
6 and _____

5 + 5 = _____ 10 - 5 = _____

6 + 6 = _____ 12 - 6 = _____

7 + 7 = _____ 14 - 7 = _____

4 + 9 = _____ 12 - 8 = _____

6 + 7 = _____ 13 - 9 = _____

8 + 6 = _____ 14 - 5 = _____

5 + 7 = _____ 8 + 4 = _____ 13 - 5 = _____

9 + 5 = _____ 9 + 3 = _____ 13 - 7 = _____

6 + 8 = _____ 7 + 6 = _____ 11 - 3 = _____

6 + _____ = 14 8 + _____ = 14 _____ - 3 = 9

8 + _____ = 11 4 + _____ = 12 _____ - 8 = 5

5 + _____ = 12 9 + _____ = 12 _____ - 7 = 6

9 + _____ = 14 8 + _____ = 13 _____ - 9 = 2

Fill the blanks.

9 + 8 = _____	9 + 6 = _____	17 - 8 = _____
6 + 9 = _____	8 + 8 = _____	16 - 9 = _____
7 + 8 = _____	9 + 5 = _____	18 - 9 = _____
9 + 7 = _____	8 + 7 = _____	15 - 8 = _____
8 + 6 = _____	7 + 9 = _____	17 - 9 = _____
9 + 9 = _____	8 + 9 = _____	16 - 8 = _____

Put in < (is less than), > (is greater than), or =.

5 + 9	8 + 7	17 - 9	15 - 6
9 + 7	8 + 9	15 - 8	14 - 6
7 + 6	5 + 8	14 - 5	17 - 8
6 + 8	7 + 9	16 - 9	14 - 5
18 - 9	15 - 7	9 + 6	8 + 8
14 - 7	16 - 8	8 + 5	7 + 7

An Addition Table

+	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

Show the following on the table:

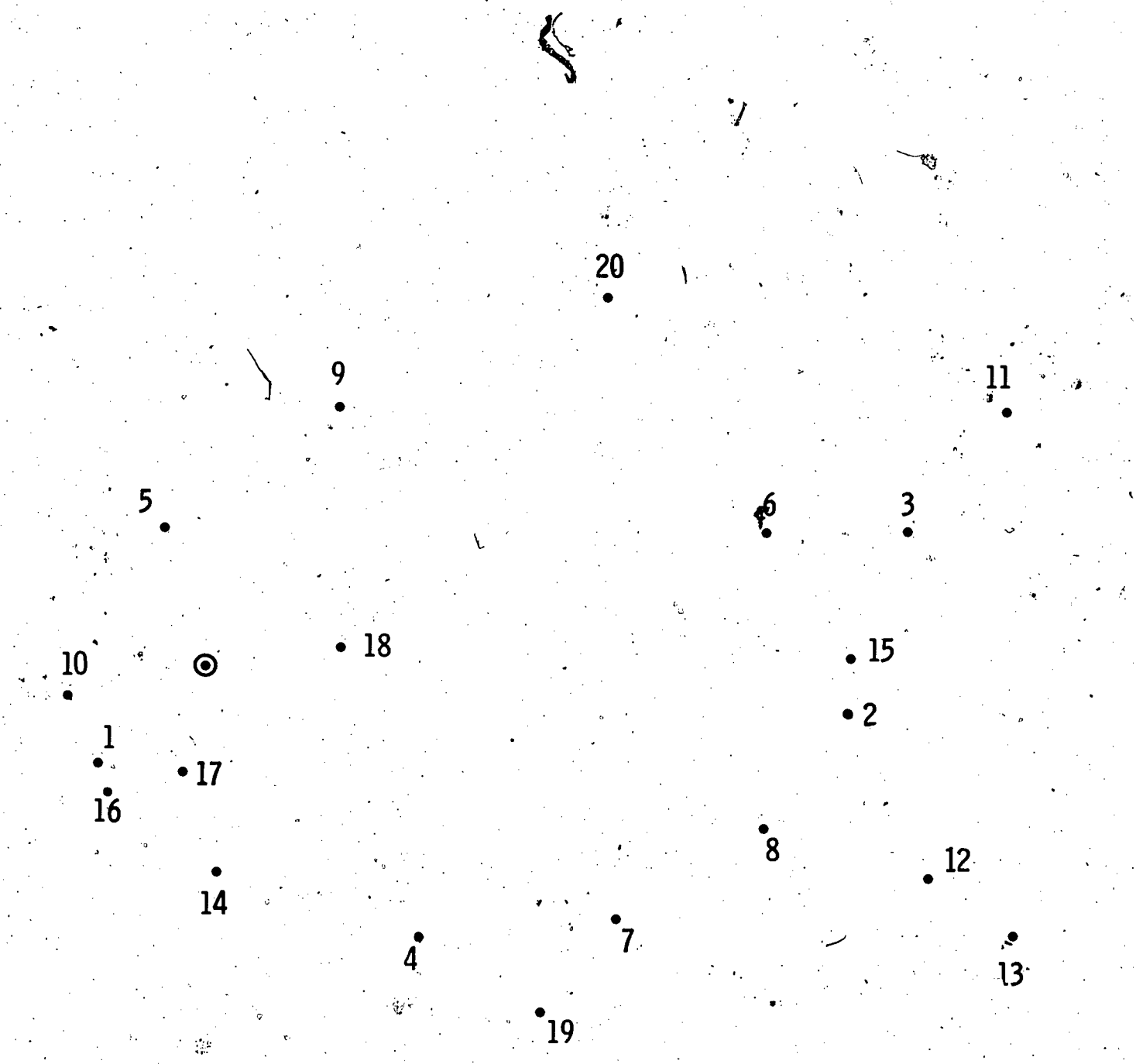
9 + 6	9 + 7	9 + 8	6 + 9	7 + 7
8 + 7	7 + 9	8 + 9	9 + 5	6 + 8
7 + 8	8 + 8	9 + 9	8 + 6	5 + 9

For Fun!

Fill the blanks.

When you have the first blank filled, find the dot that shows your answer. Start there. Draw a path from that dot to the dot that shows your second answer, and so on.

1. 16 - 7 = ____
2. 9 + 9 = ____
3. 8 + 6 = ____
4. 13 - 9 = ____
5. 12 + 7 = ____
6. 14 - 7 = ____
7. 17 - 9 = ____
8. 10 - 8 = ____
9. 9 + 3 = ____
10. 8 + 5 = ____
11. 7 + 4 = ____
12. 11 - 8 = ____
13. 8 + 7 = ____
14. 15 - 9 = ____
15. 17 + 3 = ____
16. 14 - 5 = ____
17. 11 - 6 = ____
18. 6 + 4 = ____
19. 10 - 9 = ____
20. 9 + 8 = ____
21. 8 + 8 = ____
22. 9 + 5 = ____



What picture did you find?

★ Doing and Undoing

Fill the blanks.

36 + _____ = 78 78 - _ = _____	_____ + 41 = 64
_____ - 44 = 23	26 + _____ = 68
_____ + 12 = 59	_____ - 54 = 41
78 - _____ = 65	_____ - 40 = 34

Problem Solving

Write the equations.

1. Jim had 40 marbles.
He gave 10 marbles to Bill
and 20 marbles to Jack.
How many marbles did Jim have then?
Jim had _____ marbles then.

2. Bob has 15 marbles.
Three marbles are red
and 7 marbles are blue.
How many marbles are not red or blue?
_____ marbles are not red or blue.

3. Tom had 10 marbles.
Jerry gave 15 marbles to Tom.
Tom gave 5 marbles to Mike.
How many marbles did Tom have then?
Tom had _____ marbles then.

4. Jimmy had 20 marbles.
He gave 5 marbles to John.
Mother gave some marbles to Jimmy
and then he had 25 marbles.
How many marbles did Mother give to Jimmy?
Mother gave _____ marbles to Jimmy.

Write the equations.

5. Father had 3 red books
and 4 brown ones.
He gave 2 of his brown books
to Grandfather.

How many red books and brown books
did Father have then?

Father had _____ red books and brown books.

6. Mother baked 20 chocolate cookies
and 30 white cookies.
The children ate 10 white cookies
and no chocolate cookies.
How many cookies did Mother have
then?

Mother had _____ cookies then.

7. Ten horses were in a field.
The farmer took 2 horses.

Eight cows came.
How many horses and cows are there
now?
There are _____ horses and cows now.

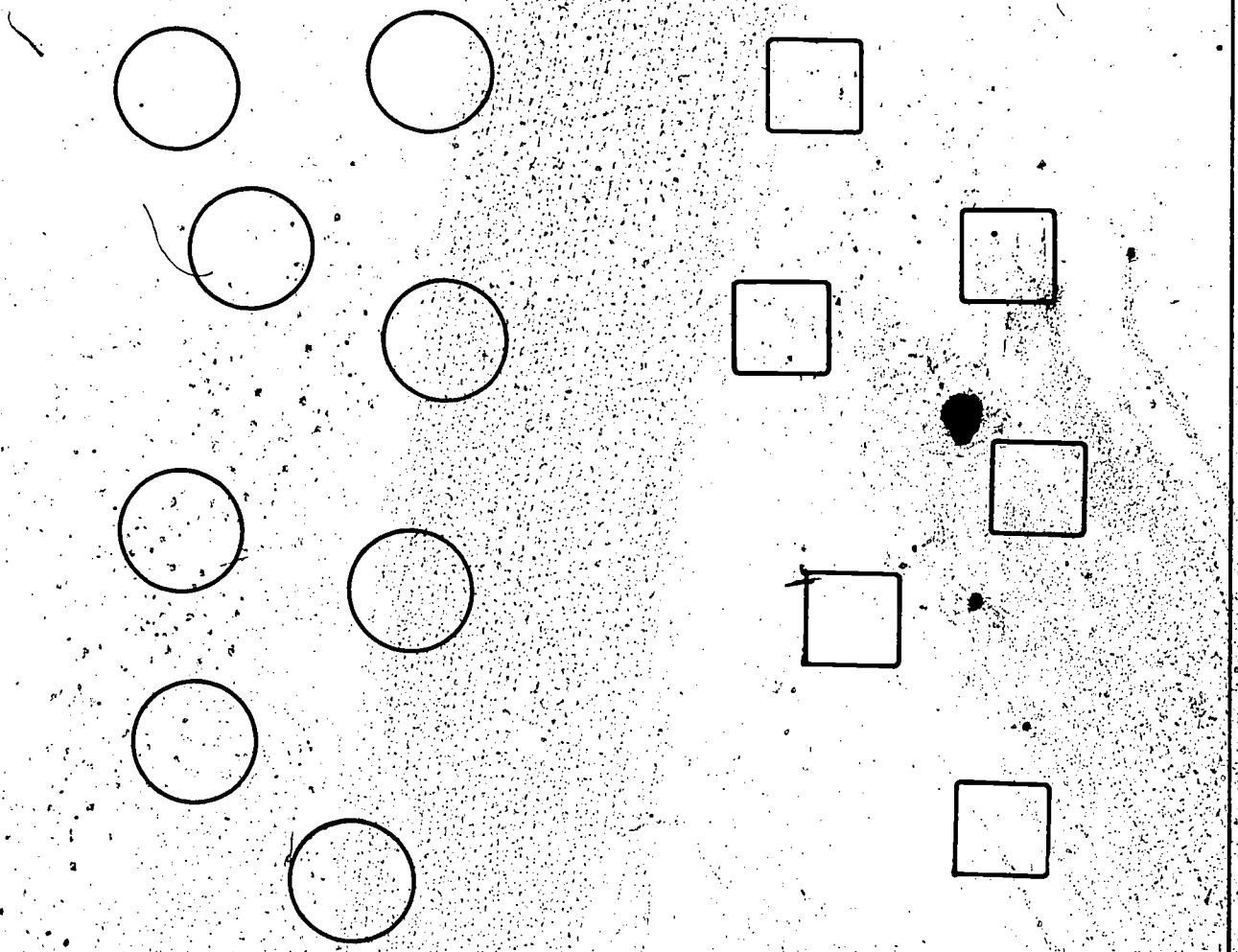
8. Kim had 2 dimes and
Mother gave him another dime.

He spent 8 cents.
How many cents does Kim have now?

Kim has _____ cents now.

Comparing Sets of Objects

1. Tell without counting which set has more members.

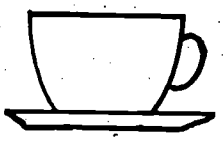


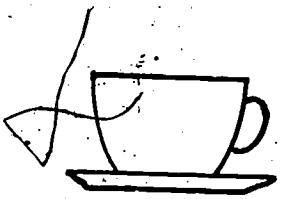
Set A

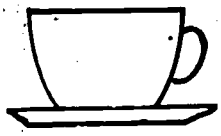
Set B

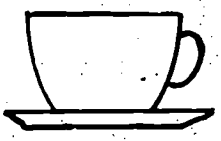
Set _____ has more members.

2. Tell without counting which set has fewer members.







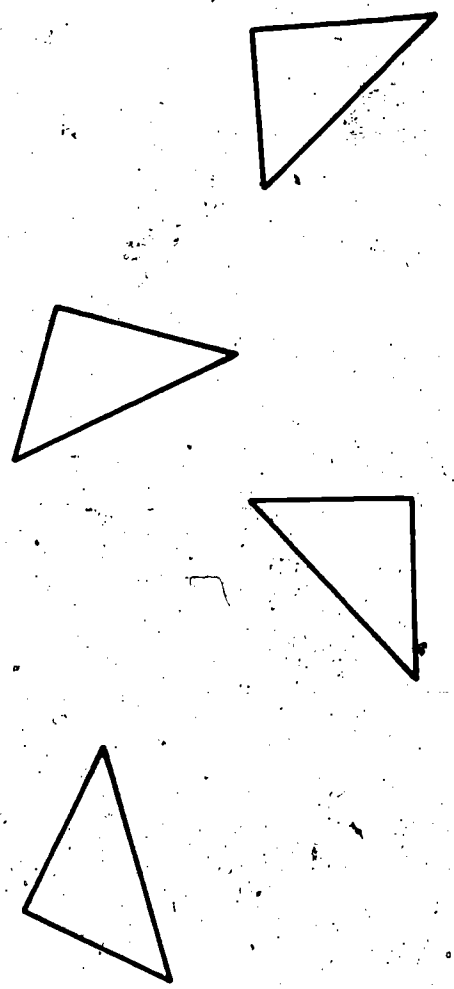


Set C

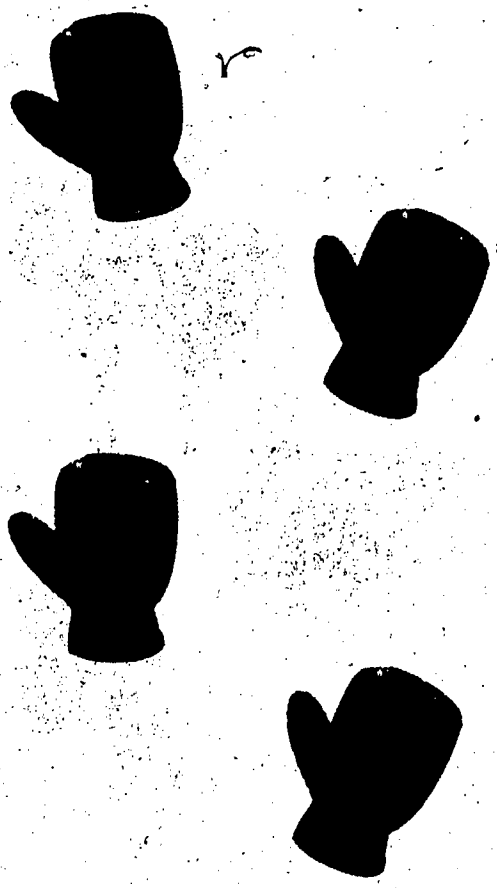
Set D

Set _____ has fewer members.

3. Without counting, compare these sets.



Set E



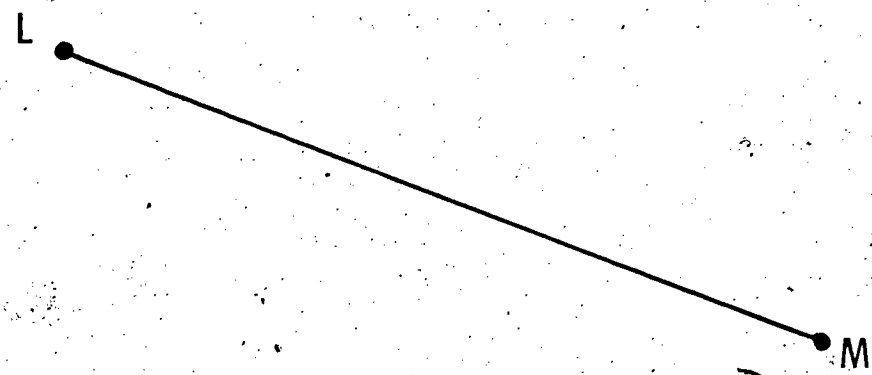
Set F

Put a ring around the correct words.

Set E has fewer members than / as many members as / more members than Set F.

Line Segments

1.



Write names for the two endpoints of $\overline{LM}$. _____ _____

Write another name for $\overline{LM}$. _____.

2.

One point is named R.

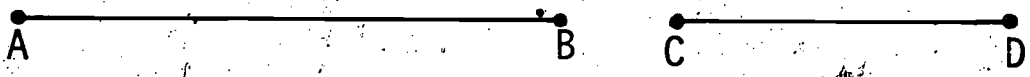
Another point is marked.

Name this point O.

Then draw $\overline{OR}$.

Comparing Line Segments

1.



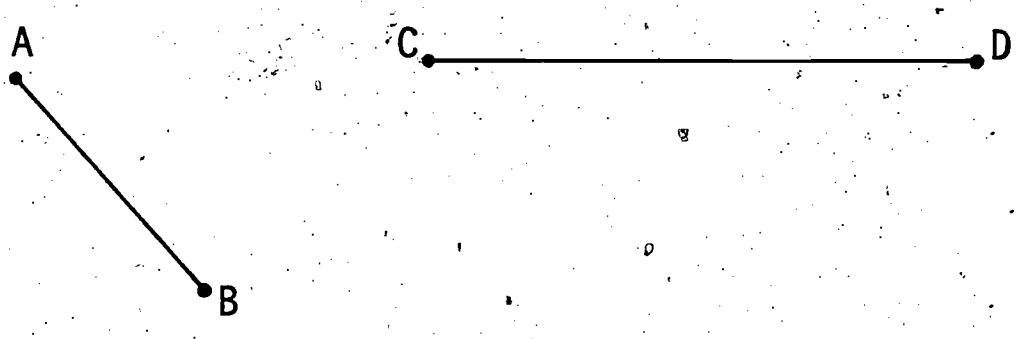
Which line segment is longer? _____

2.

Which line segment is shorter? _____

Comparing Line Segments

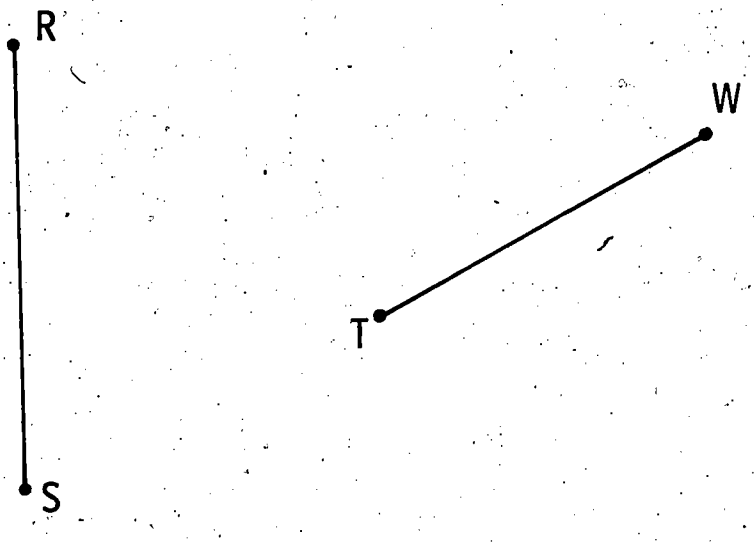
3.



Put a ring around the correct word.

$\overline{AB}$ is shorter / longer than $\overline{CD}$.

4.

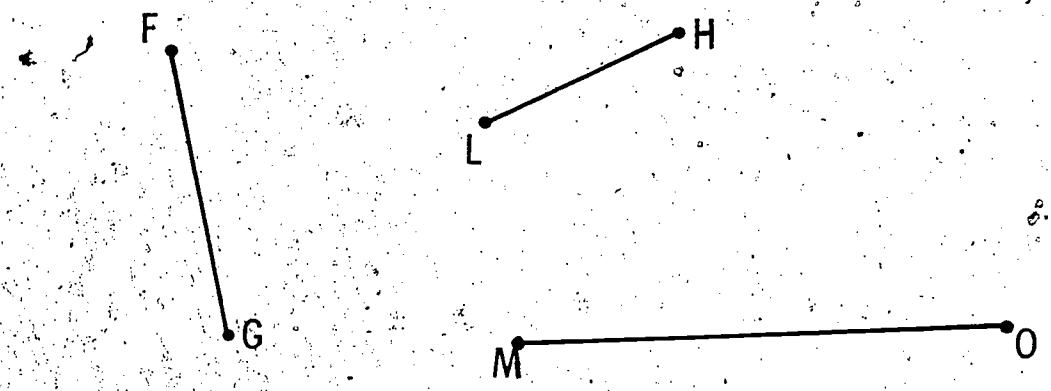


Put a ring around the correct word.

$\overline{RS}$ is shorter / longer than $\overline{TW}$.

Comparing Line Segments

5.



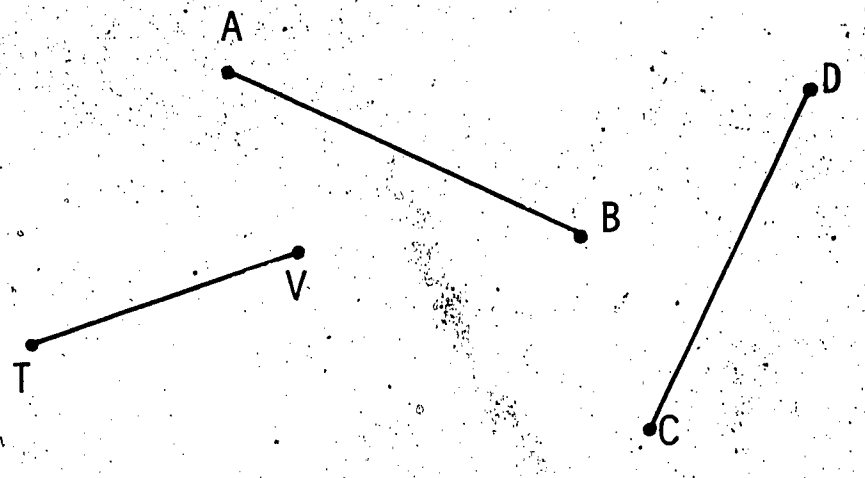
$\overline{FG}$ is shorter than _____.

$\overline{GF}$ is longer than _____.

$\overline{MO}$ is longer than _____ and _____.

$\overline{HL}$ is shorter than _____ and _____.

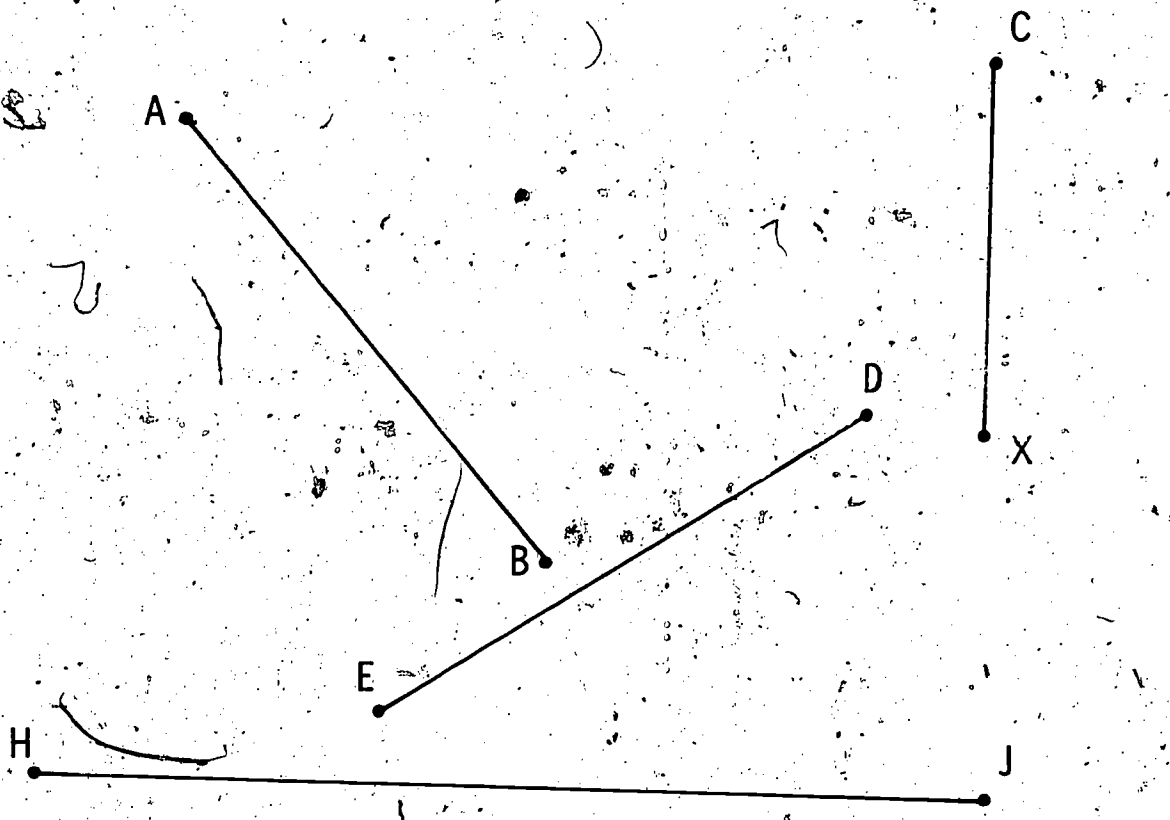
6.



Put a ring around the correct words.

$\overline{AB}$ is shorter than / is the same length as / is longer than $\overline{CD}$.

Comparing Line Segments



7. Write a name of a segment in each blank.

_____ is shorter than $\overline{DE}$.

_____ is longer than $\overline{BA}$.

_____ is the same length as _____.

8. Write the correct word in each row.

$\overline{CX}$ is _____ than $\overline{AB}$.

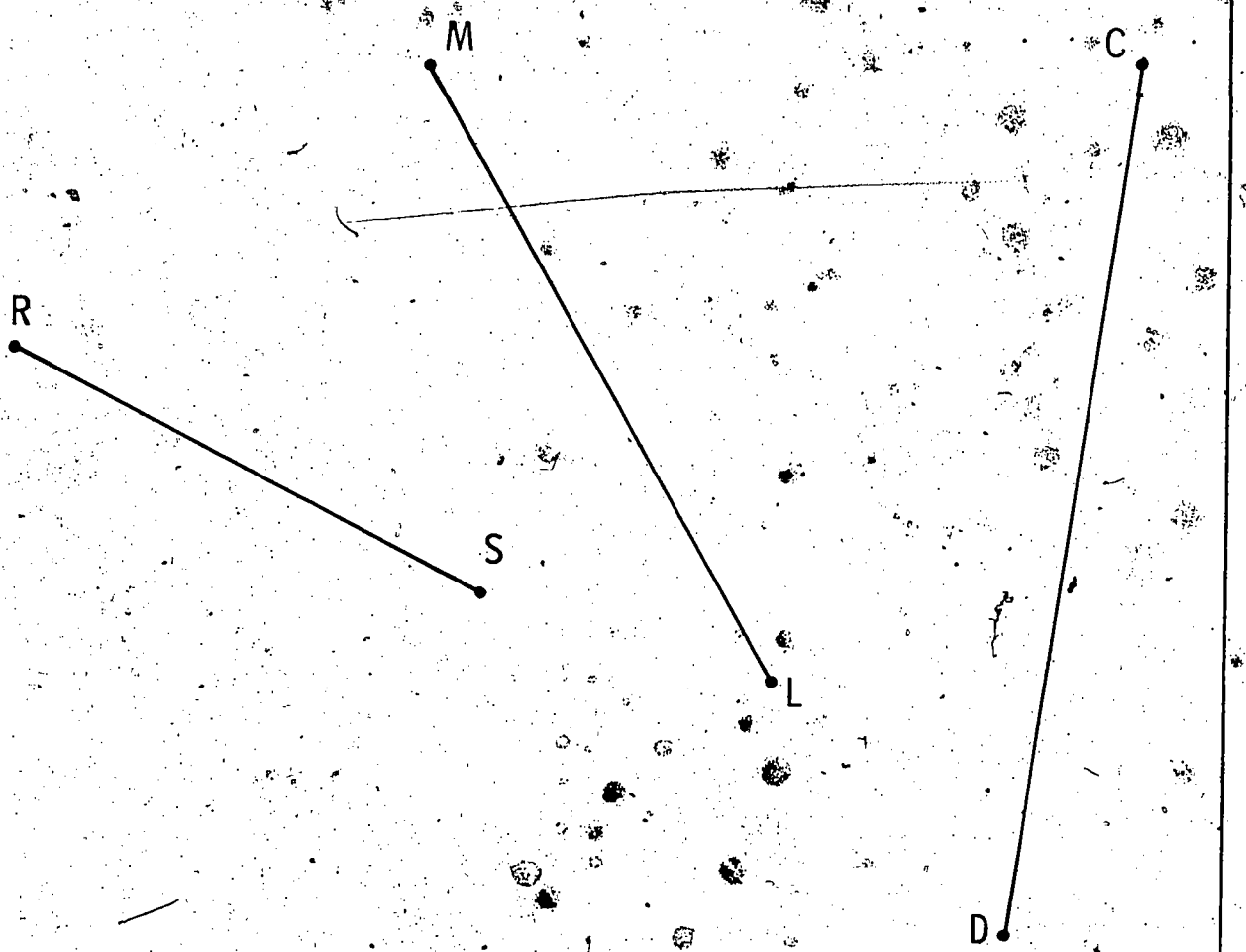
$\overline{AB}$ is _____ than $\overline{HJ}$.

$\overline{ED}$ is _____ than $\overline{CX}$.

Congruence and Line Segments

1.

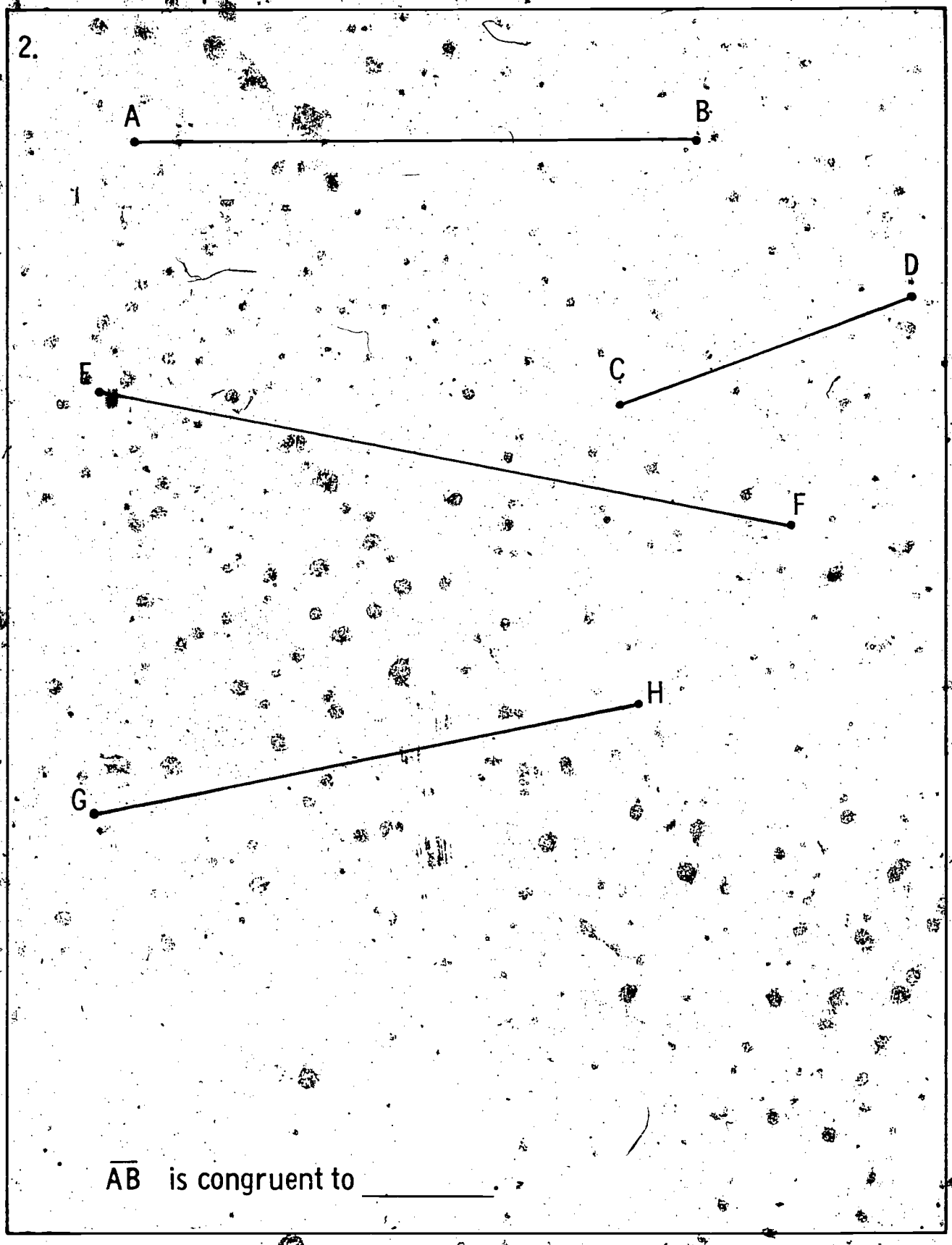
Which line segment is congruent to $\overline{AB}$?



_____ is congruent to $\overline{AB}$.

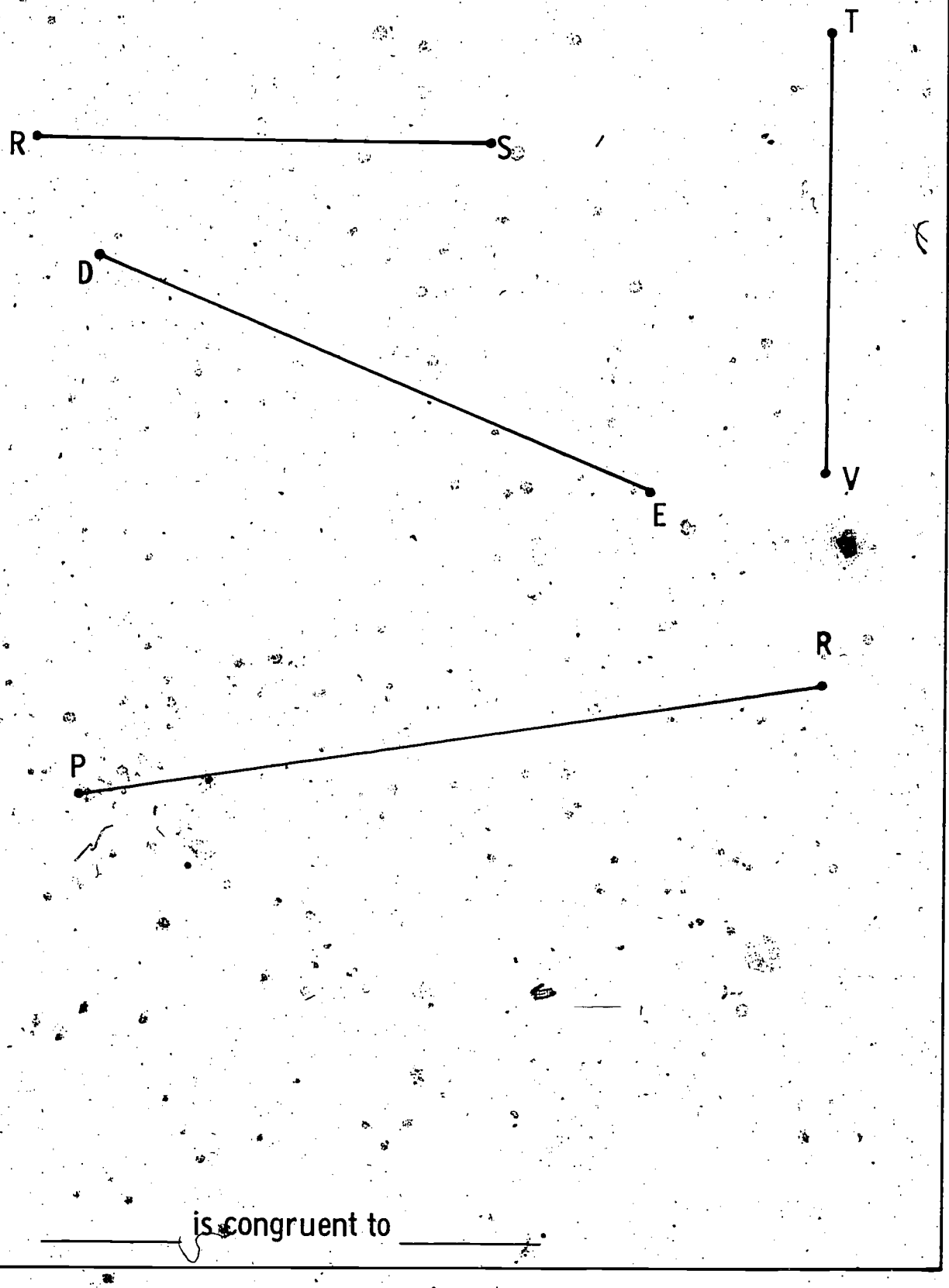
Congruence of Line Segments

2.



$\overline{AB}$ is congruent to _____.

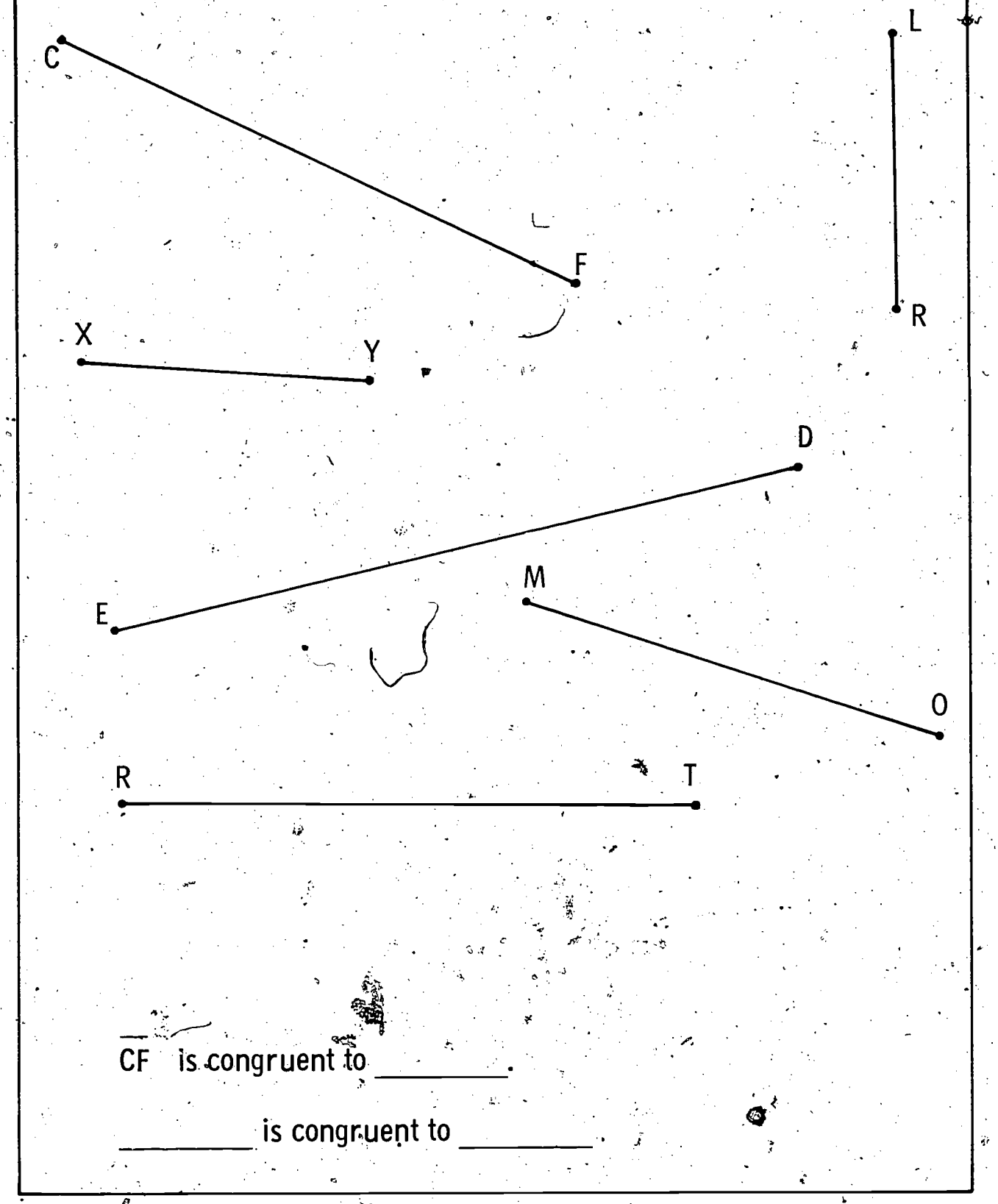
3.



_____ is congruent to _____

Congruence of Line Segments

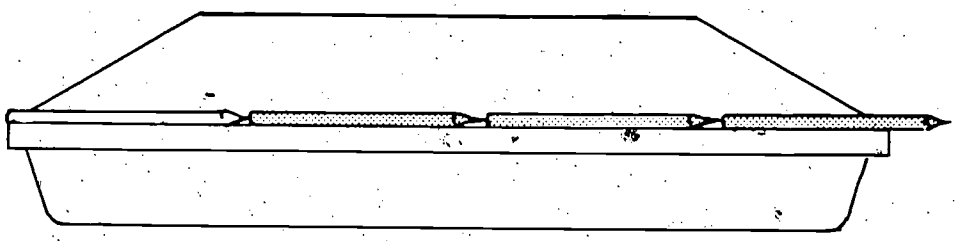
4.



$\overline{CF}$ is congruent to _____.

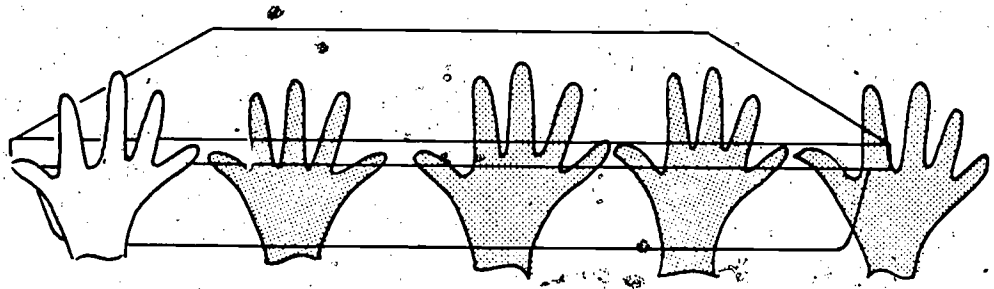
_____ is congruent to _____.

1.



This desk is between _____ and _____ pencils long.

2.



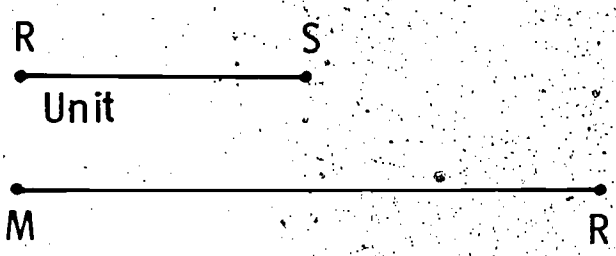
This desk is between _____ and _____ hand-spans long.

3.

My desk is between _____ and _____ pencils long.

My desk is between _____ and _____ hand-spans long.

1.



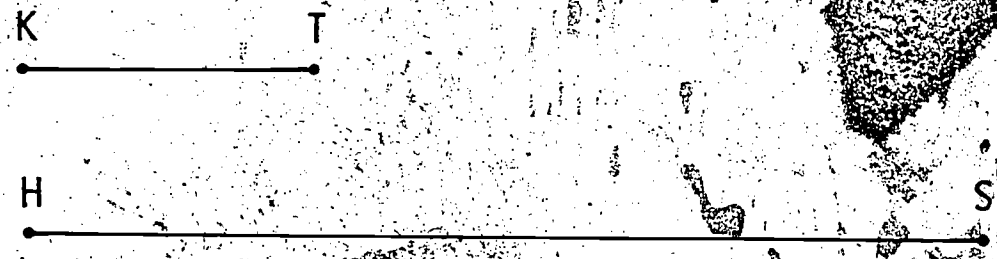
The unit is _____.

The measure of $\overline{RS}$ is _____.

The length of $\overline{MR}$ is _____ units.

The measure of $\overline{MR}$ is _____.

2.



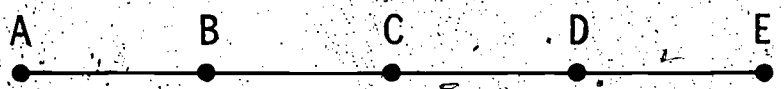
The unit is _____.

The measure of $\overline{KT}$ is _____.

The length of $\overline{HS}$ is _____ units.

The measure of $\overline{HS}$ is _____.

3.



$\overline{AB}$ is the unit.

The length of $\overline{AC}$ is _____.

The measure of $\overline{AC}$ is _____.

The length of $\overline{AD}$ is _____.

The measure of $\overline{AD}$ is _____.

The measure of $\overline{BE}$ is _____.

The length of $\overline{BE}$ is _____.

The measure of $\overline{CE}$ is _____.

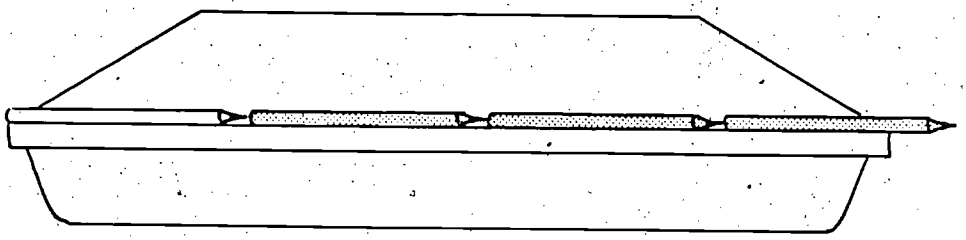
The length of $\overline{CE}$ is _____.

$\overline{BE}$ is congruent to _____.

$\overline{CE}$ is congruent to _____, and _____.

$\overline{ED}$ is congruent to _____, _____, and _____.

1.



The length of the desk is more than _____ pencils.

The measure of the desk is greater than _____.

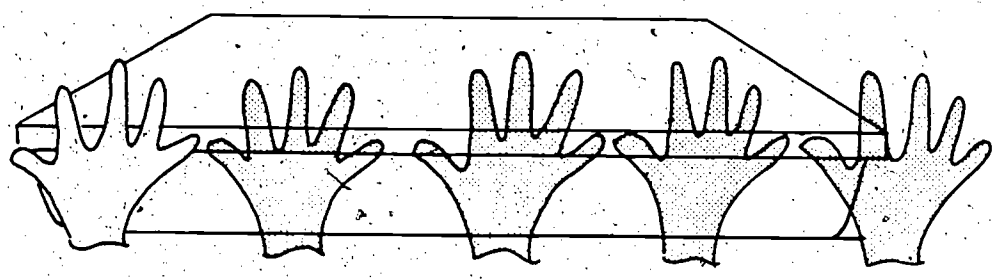
The length of the desk is between _____ and _____ pencils.

The measure of the desk is between _____ and _____.

The measure of the desk is nearer to _____ than to _____.

The length of the desk to the nearest pencil unit is _____ pencils.

2.



The length of the desk to the nearest unit is _____ hand-spans.

3.

The length of $\overline{CD}$ is greater than _____ units.

The measure of $\overline{CD}$ is greater than _____.

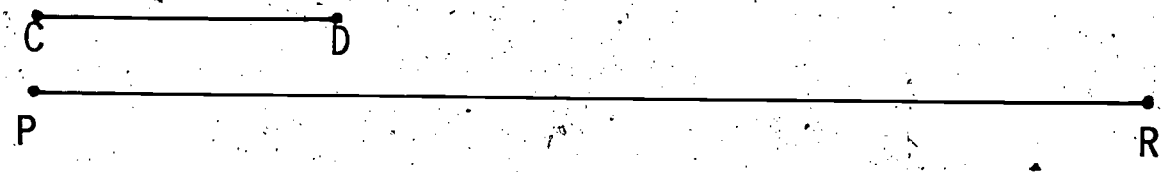
The measure of $\overline{CD}$ is less than _____.

The length of $\overline{CD}$ is less than _____ units.

The length of $\overline{CD}$ is nearer to _____ units than to _____ units.

The length of $\overline{CD}$ to the nearest unit is _____ units.

4.



The length of $\overline{RP}$ is greater than _____ units.

The measure of $\overline{RP}$ is greater than _____.

The length of $\overline{RP}$ is less than _____ units.

The measure of $\overline{RP}$ is less than _____.

The length of $\overline{RP}$ is nearer to _____ than to _____ units.

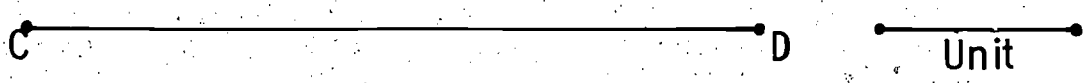
The length of $\overline{RP}$ to the nearest unit is _____ units.

5.

The length of $\overline{AB}$ to the nearest unit is _____ units.

The measure of $\overline{AB}$ to the nearest unit is _____.

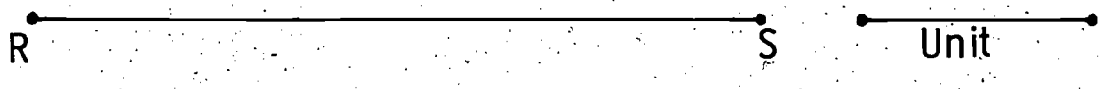
6.



The length of $\overline{CD}$ to the nearest unit is _____ units.

The measure of $\overline{CD}$ to the nearest unit is _____.

7.



The length of $\overline{RS}$ to the nearest unit is _____ units.

Length to the Nearest Unit.

8.

The measure of $\overline{NP}$ to the nearest unit is _____.

The length of $\overline{NP}$ to the nearest unit is _____ units.

9.

The length of $\overline{LP}$ to the nearest unit is _____ units.

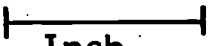
The measure of $\overline{LP}$ to the nearest unit is _____.

10.

The length of $\overline{TR}$ to the nearest unit is _____ units.

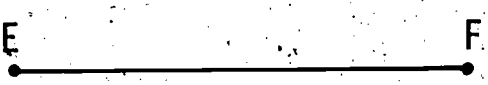
Using a Standard Unit of Length

1. 



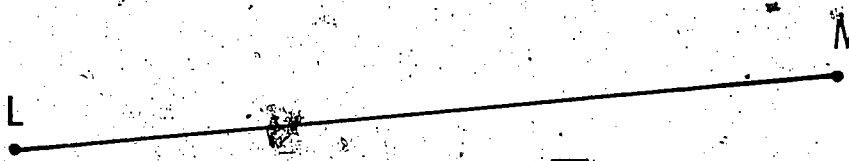
The measure of $\overline{CD}$ is 4.

$\overline{CD}$ is 4 inches long.

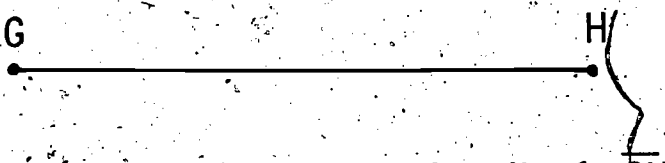
2. 

The measure of $\overline{EF}$ is _____.

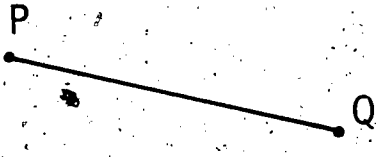
The length of $\overline{EF}$ is _____ inches.

3. 

$\overline{LM}$ is _____ inches long.

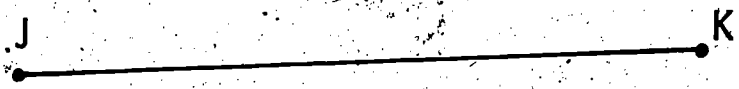
4. 

Length of $\overline{GH}$ is _____ inches.

5. 

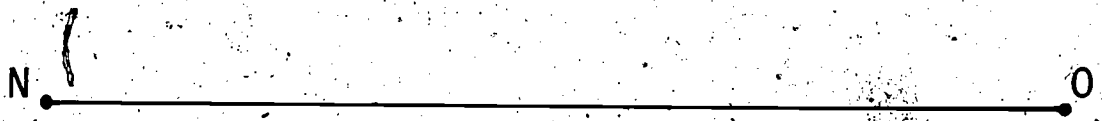
Length of $\overline{PQ}$ is _____ inches.

6.



$\overline{KJ}$ is _____ inches long.

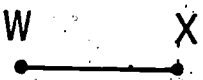
7.



The measure of $\overline{ON}$ is _____.

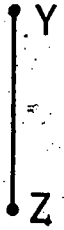
The measure of $\overline{NO}$ is _____.

8.



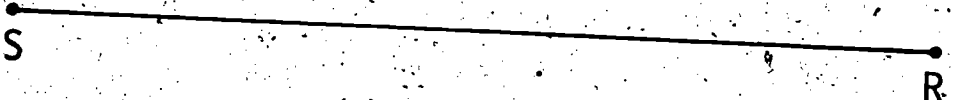
The length of $\overline{WX}$ is _____.

9.



$\overline{YZ}$ is _____ inches long.

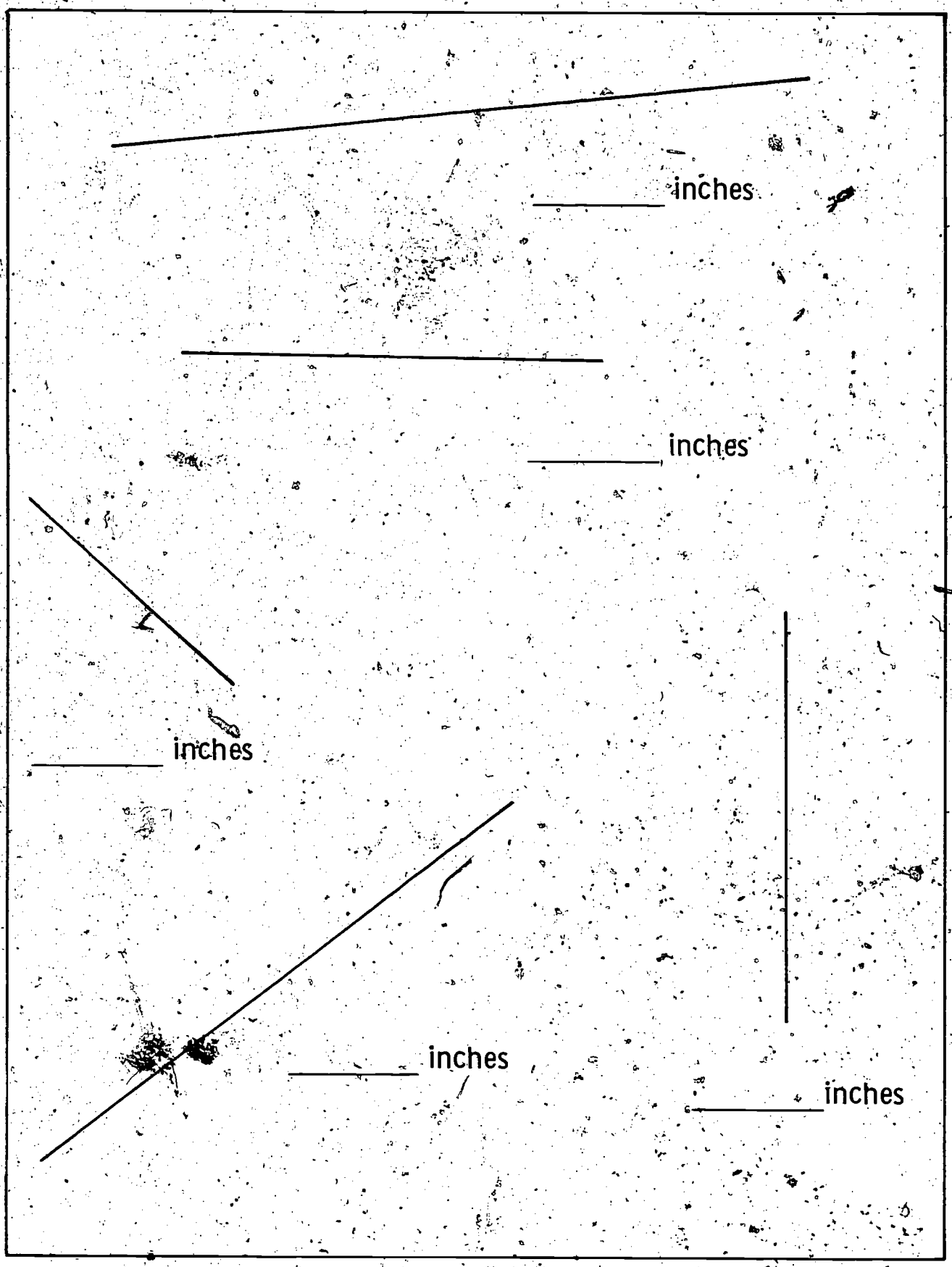
10.



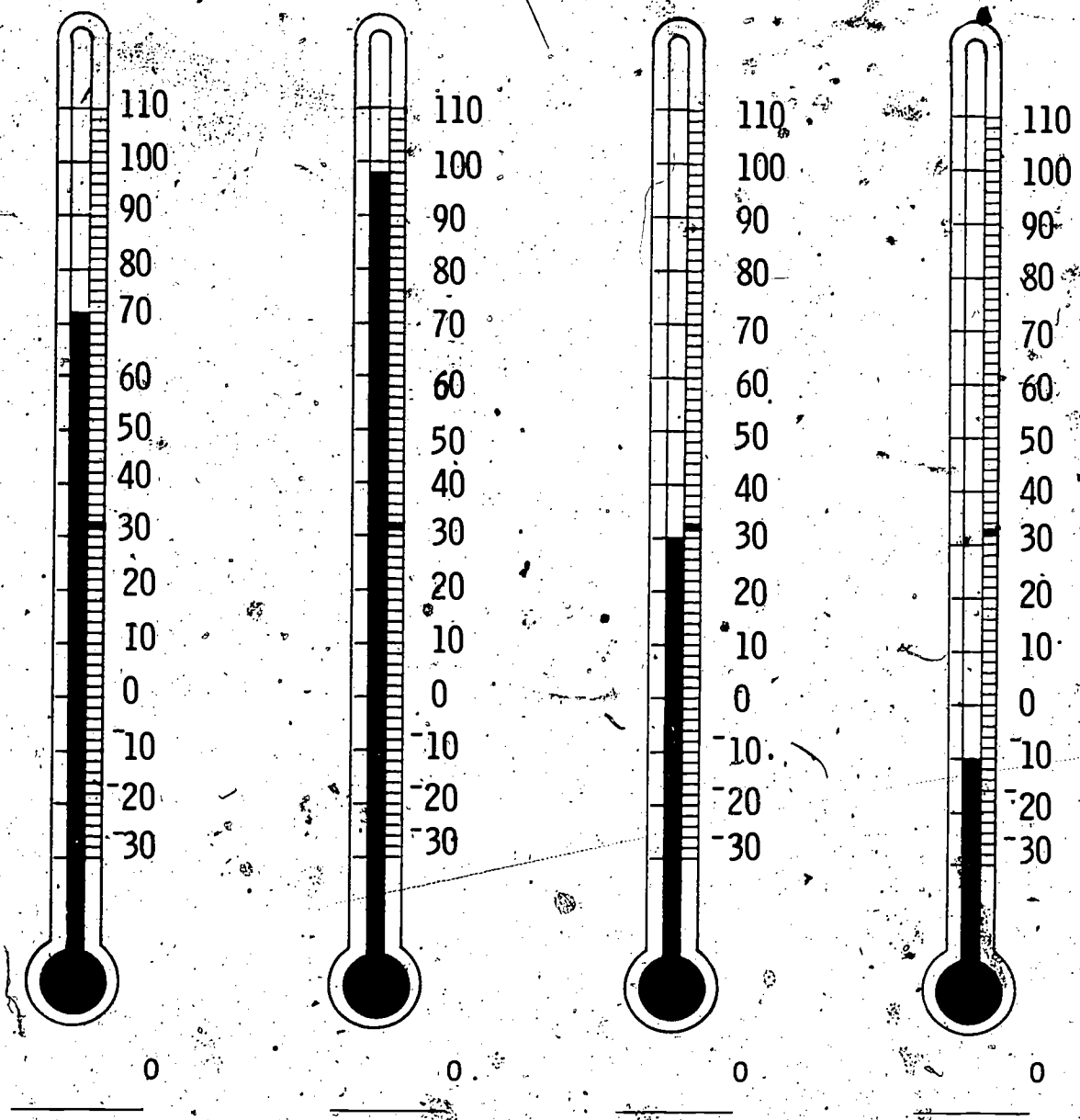
The length of $\overline{RS}$ is _____ inches.

The length of $\overline{SR}$ is _____.

Linear Scale



Writing Temperatures



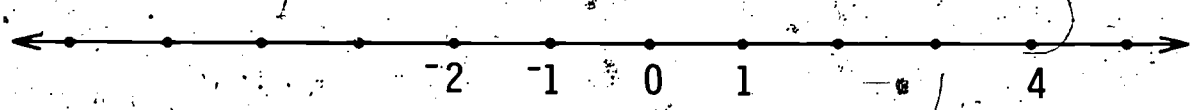
Which temperature is warmest? _____

Which temperatures are below freezing? _____ _____

Which temperature is coldest? _____

Which temperature is nearest to the temperature of our room? _____

Write the missing numbers



Write < or >.

35	22	14	16	98	67
2	0	7	8	17	35
2	-1	-1	0	42	13
-3	3	5	3	5	-5
-6	2	-5	3	6	-2
-22	-35	4	-42	51	-49
15	-213	-78	20	-498	2
1	0	-65	-64	-21	-22
46	-29	475	-569	-757	-38
-3	0	15	-32	-68	-64
82	-82	82	83	-83	82
-212	0	-423	-424	6	-6
51	-54	-72	79	-724	72

Renaming Numbers.

		Hundreds	Tens	Ones		Tens	Ones
165	is	1	6	5	or	16	5
210	is				or		
198	is				or		
____	is	1	4	7	or		
____	is				or	23	5
73	is				or		
321	is				or		
150	is				or		
223	is				or		
____	is	2	8	6	or		
182	is				or		
____	is				or	36	5

Renaming Numbers

Fill the blanks.

145 = 100 + 40 + 5	145 = 140 + 5
213 = ____ + ____ + ____	213 = _____ + _____
___ = 100 + 60 + 8	___ = 160 + 8
196 = ____ + ____ + ____	196 = _____ + _____
457 = ____ + ____ + ____	457 = _____ + _____
394 = ____ + ____ + ____	394 = _____ + _____
___ = 100 + 40 + 0	___ = 140 + 0
180 = ____ + ____ + ____	180 = _____ + _____
253 = ____ + ____ + ____	253 = _____ + _____
124 = ____ + ____ + ____	124 = _____ + _____
___ = 200 + 70 + 9	___ = 270 + 9
177 = ____ + ____ + ____	177 = _____ + _____
159 = ____ + ____ + ____	159 = _____ + _____
210 = ____ + ____ + ____	210 = _____ + _____

Addition

4 tens and 8 tens are _____ tens.

40 + 80 = _____

40
80
120

7 tens and 6 tens are _____ tens.

70 + 60 = _____

70
60

3 tens and 9 tens are _____ tens.

30 + 90 = _____

30
90

5 tens and 8 tens are _____ tens.

50 + 80 = _____

50
80

9 tens and 7 tens are _____ tens.

90 + 70 = _____

90
70

4 tens and 6 tens are _____ tens.

40 + 60 = _____

40
60

8 tens and 9 tens are _____ tens.

80 + 90 = _____

80
90

Subtraction

Start with 15 tens. Remove 7 tens.
You have _____ tens left.
150 - 70 = _____

$$\begin{array}{r} 150 \\ -\ 70 \\ \hline \end{array}$$

Start with 16 tens. Remove 8 tens.
You have _____ tens left.
160 - 80 = _____

$$\begin{array}{r} 160 \\ -\ 80 \\ \hline \end{array}$$

Start with 14 tens. Remove 8 tens.
You have _____ tens left.
140 - 80 = _____

$$\begin{array}{r} 140 \\ -\ 80 \\ \hline \end{array}$$

Start with 12 tens. Remove 5 tens.
You have _____ tens left.
120 - 50 = _____

$$\begin{array}{r} 120 \\ -\ 50 \\ \hline \end{array}$$

Start with 13 tens. Remove 9 tens.
You have _____ tens left.
130 - 90 = _____

$$\begin{array}{r} 130 \\ -\ 90 \\ \hline \end{array}$$

Start with 11 tens. Remove 5 tens.
You have _____ tens left.
110 - 50 = _____

$$\begin{array}{r} 110 \\ -\ 50 \\ \hline \end{array}$$

Addition and Subtraction

Write each problem another way. Fill the blanks.

30 + 80 = _____ 30 80 110	130 - 70 = _____ 130 -70 60	50 + 50 = _____
70 + 80 = _____ _____	160 - 70 = _____	150 - 90 = _____
140 - 50 = _____	60 + 60 = _____	80 + 40 = _____
100 - 70 = _____	110 - 40 = _____	160 - 80 = _____

Addition

34 + 83 = 117 30 + 4 80 + 3 110+7	72 + 82 = _____ 70 + 6 80 + 2
54 + 92 = _____	80 + 47 = _____
75 + 63 = _____	91 + 84 = _____
82 + 57 = _____	78 + 30 = _____

Subtraction

176 - 85 = _____ 170 + 6 -(80 + 5) _____	144 - 73 = _____ 140 + 4 -(70 + 3) _____
109 - 63 = _____ 100 + 9 -(60 + 3) _____	167 - 86 = _____ 160 + 7 -(80 + 6) _____
128 - 74 = _____	185 - 92 = _____
169 - 94 = _____	113 - 40 = _____

Addition

12 45 7 50 57	34 92 8 120 128	36 61
63 24	47 22	64 43
59 70	75 21	21 66
85 32	53 83	92 65

Addition

$55 + 8 = \_\_\_\_\_$

You may do this:

$$\begin{array}{r} 50 + 5 \\ \quad\quad 8 \\ \hline 50 + 13 \end{array}$$

$50 + 10 + 3 = 63$

You may do this:

$$\begin{array}{r} 55 \\ 8 \\ \hline 13 \\ 50 \\ \hline 63 \end{array} \quad \text{or} \quad \begin{array}{r} 55 \\ 8 \\ \hline 50 \\ 13 \\ \hline 63 \end{array}$$

Use the way you like best.

$42 + 8 = \_\_\_\_\_$	$26 + 7 = \_\_\_\_\_$
$45 + 9 = \_\_\_\_\_$	$57 + 4 = \_\_\_\_\_$

Addition

$72 + 19 = \_\_\_\_\_$

You may do this:

$$\begin{array}{r} 70 + 2 \\ 10 + 9 \\ \hline 80 + 11 = 91 \end{array}$$

You may do this:

$$\begin{array}{r} 72 \\ 19 \\ \hline 11 \\ 80 \\ \hline 91 \end{array} \quad \text{or} \quad \begin{array}{r} 72 \\ 19 \\ \hline 80 \\ 11 \\ \hline 91 \end{array}$$

Use the way you like best.

$46 + 47 = \_\_\_\_\_$	$24 + 56 = \_\_\_\_\_$
$73 + 17 = \_\_\_\_\_$	$39 + 61 = \_\_\_\_\_$

Addition

35 + 48 = _____

30 + 5
40 + 8

or

35
48

Use the way you like best.

29 + 46 = _____	67 + 49 = _____
58 + 25 = _____	13 + 48 = _____
64 + 38 = _____	37 + 45 = _____

Addition

28 + 89 = _____	76 + 57 = _____
63 + 27 = _____	38 + 56 = _____
18 + 88 = _____	45 + 65 = _____
92 + 16 = _____	82 + 49 = _____

Addition

Use the way you like best.

28 + 42 + 53 = _____	37 + 62 + 36 = _____
14 + 39 + 54 = _____	71 + 28 + 55 = _____
36 + 79 + 42 = _____	30 + 47 + 59 = _____

Addition

44 + 57 + 38 = _____	69 + 95 + 33 = _____
15 + 90 + 27 = _____	41 + 14 + 98 = _____
33 + 52 + 45 = _____	26 + 74 + 98 = _____

Subtraction

Think what fact you will use. Then rename.

Fill the blanks.

42 - 7 = _____ 42 30+12 -7 -7 35	78 - 3 = _____ 78 70+8 -3 -3 75
21 - 9 = _____	73 - 8 = _____
86 - 6 = _____	35 - 8 = _____
54 - 5 = _____	45 - 3 = _____

Subtraction

Think what fact you will use. Then rena

Fill the blanks.

88 - 9 = _____	26 - 8 = _____
67 - 6 = _____	74 - 6 = _____
46 - 7 = _____	95 - 7 = _____
32 - 5 = _____	27 - 9 = _____

Subtraction

Rename in a way that is helpful. Fill the blank in the equation.

95 - 39 = _____	32 - 16 = _____
56 - 28 = _____	77 - 39 = _____
48 - 46 = _____	80 - 53 = _____
63 - 49 = _____	27 - 13 = _____

Subtraction

Rename in a way that is helpful. Fill the blank.

96 - 38 = _____	82 - 45 = _____
60 - 26 = _____	77 - 58 = _____
93 - 27 = _____	82 - 24 = _____
71 - 58 = _____	86 - 79 = _____

Doing and Undoing

Find n.

Show your work here.

n + 55 = 81

n = 81--55

n = _____

n - 36 = 49

n = _____

n = _____

n - 21 = 39

n = _____

n = _____

n + 49 = 92

n = _____

n = _____

Doing and Undoing

Find n. Show your work here.

88 - n = 59

n = _____

n = _____

17 + n = 85

n = _____

n = _____

n - 38 = 75

n = _____

n = _____

78 - n = 35

n = _____

n = _____

* Two Step Problems

Find n.

$n - 8 = 7 + 6$ $n =$ _____	$7 + 8 + n = 31$ $n =$ _____
$75 - n = 21 + 16$ $n =$ _____	$(52 + n) - 13 = 61$ $n =$ _____
$26 + 49 + n = 129$ $n =$ _____	$n - 10 = 35 + 28 + 52$ $n =$ _____

Solving Problems

Write the equation.

Use n for the number you do not know.

1. Sam had some balls.
   He got 2 more balls.
   Now he has 6 balls.
   How many balls did Sam have at first?

   Sam had _____ balls at first.

2. Mary had 7 books.
   Sam took 2 books.
   How many books did Mary have then?

   Mary had _____ books then.

3. Jimmy had 3 cookies.
   Mother gave him some cookies.
   Then he had 8 cookies.
   How many cookies did Mother give to Jimmy?

   Mother gave _____ cookies to Jimmy.

Solving Problems

Which equation is related to the story?

Cross out the one that does not belong.

1. Billy had 6 apples.
   He gave 2 apples to Jane.
   How many apples does Billy have now?

   $2 + n = 6$

   $6 + 2 = n$

   Billy has ____ apples now.

2. Beth had some toys.
   She gave 3 toys to her little brother.
   Then she had 4 toys.
   How many toys did she have at first?

   $n - 3 = 4$

   $n + 3 = 4$

   Beth had ____ toys at first.

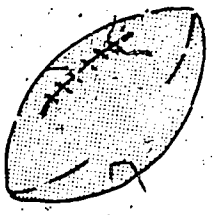
3. John had 8 cents.
   He found some cents.
   Then he had 10 cents.
   How many cents did he find?

   $8 + n = 10$

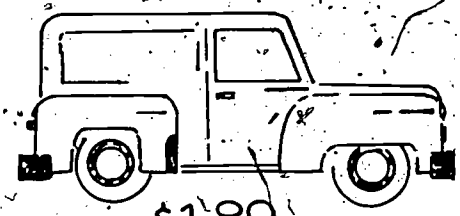
   $8 + 10 = n$

   John found ____ cents.

TOYS



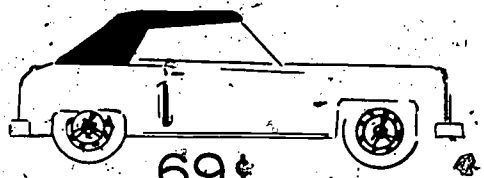
$4.49



$1.89

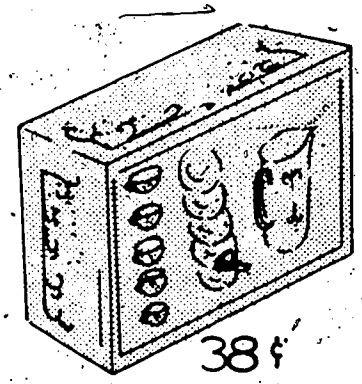
$9.95

79¢

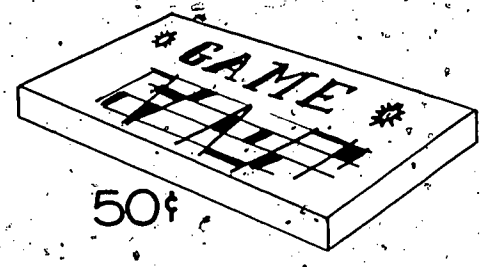


69¢

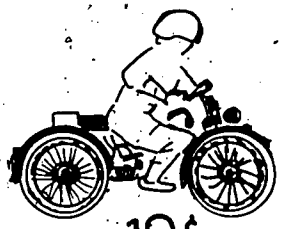
10¢



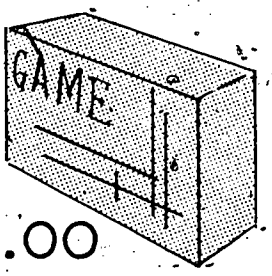
38¢



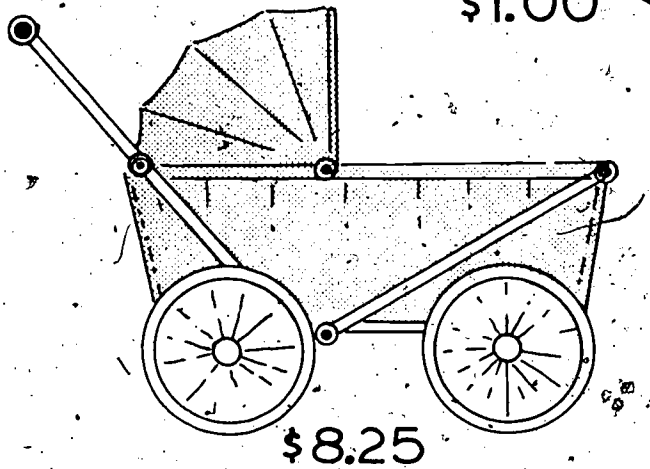
50¢



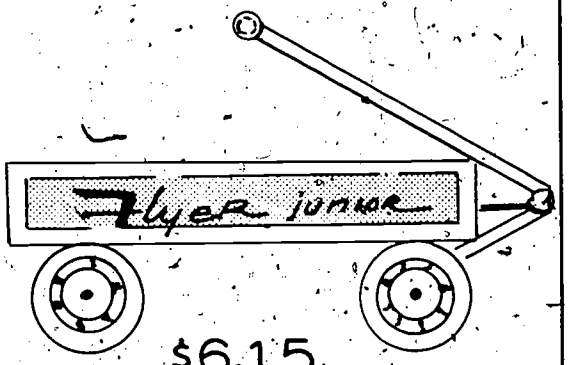
19¢



$1.00



$8.25



$6.15

Money

What amounts of money are shown?

Write each, using numerals and money signs.

sixty-nine cents _____

nineteen cents _____

six dollars and fifteen cents _____

thirty-eight cents _____

ten cents _____

four dollars and forty-nine cents _____

one dollar and eighty-nine cents _____

fifty cents _____

eight dollars and twenty-five cents _____

seventy-nine cents _____

one dollar _____

Steve had saved $.55. He wanted to buy a ball that cost $.89. How much more money did he need?

Steve needed _____ more.

Kathy bought doll dishes for 49¢ and a cookie set for 79¢. How much did both things together cost?

Both things together cost _____.

When Larry went to the toy store, he had 50¢. He bought a horn. The man at the store gave him 11¢ change. How much did the horn cost?

The horn cost _____.

Scott took a toy truck and a 25¢ car to the check-out counter. The truck did not have a price mark on it. The girl at the counter said, "Sixty-two cents, please." What was the price of the truck?

The price of the truck was _____.

Betty had a stamp album. Before Christmas she had 82 stamps in it. Her brother gave her 25 stamps for Christmas. How many stamps did she have then?

Betty had _____ stamps.

Jim's airplane needed paint. He bought some paint for 19¢. How much change did he get from a quarter?

He got _____ change.

David bought a boat for 49¢. Jack bought a boat for 98¢. How much more did Jack's boat cost than David's?

Jack's boat cost _____ more than David's.

Aunt Sally bought some toys for her sister's new baby. She paid 35¢ for a rattle, 25¢ for a duck, and 98¢ for a stuffed bear. How much did she spend for the toys?

She spent _____ for the toys.

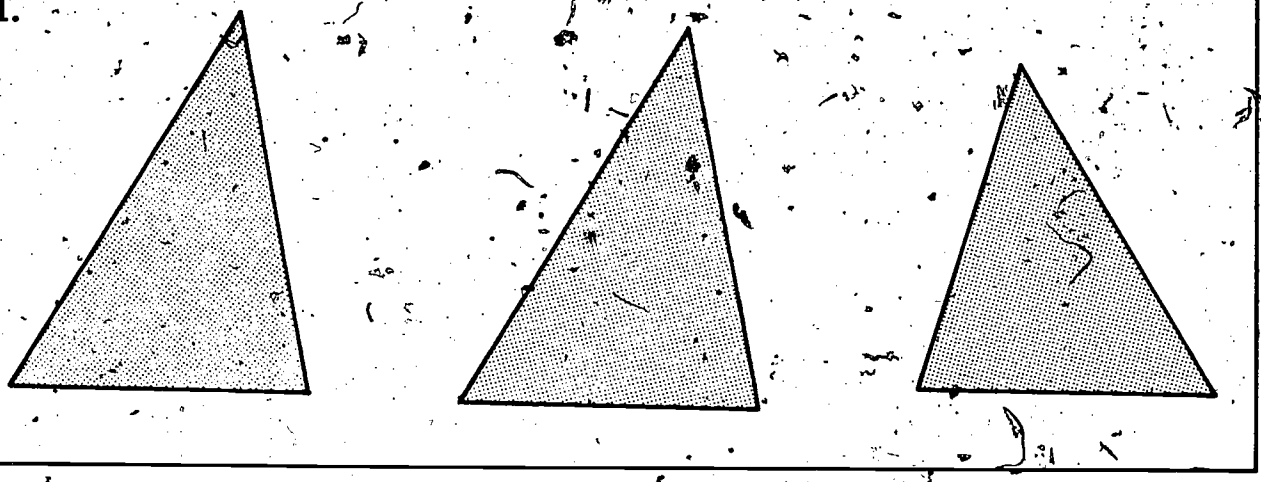
Dick had saved $1.75. After he spent 98¢ for a baseball and 49¢ for a kite, how much money did he have?

He had _____.

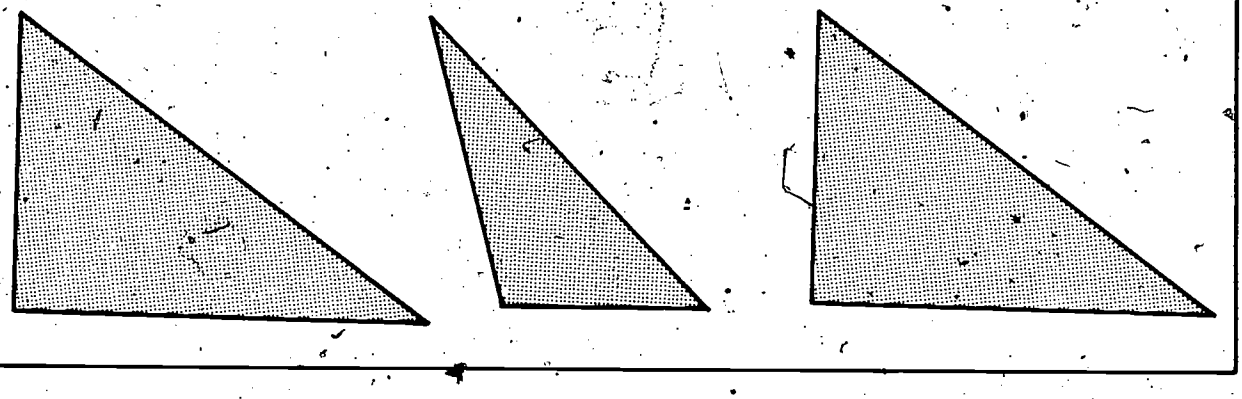
Congruence of Triangular Regions

In each row mark the two regions that are congruent.

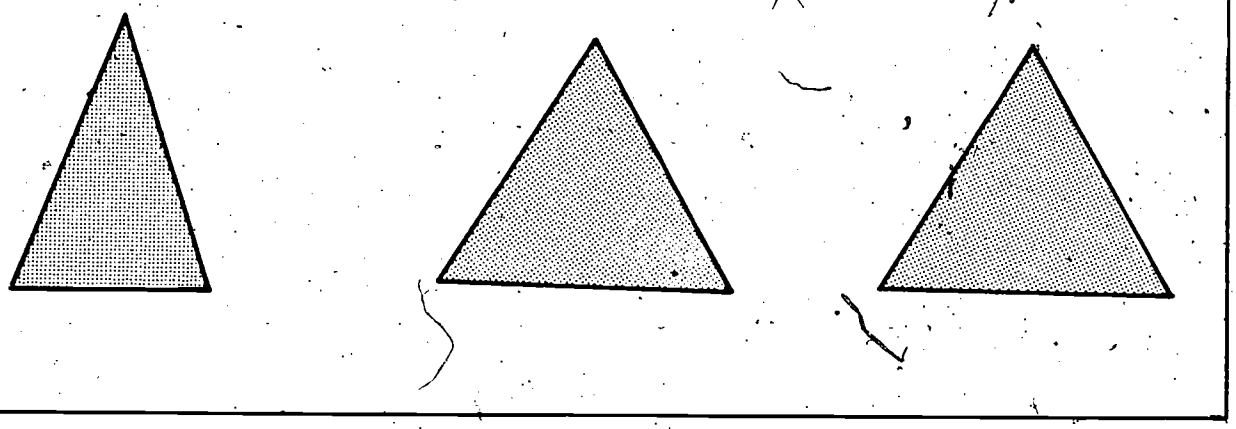
1.



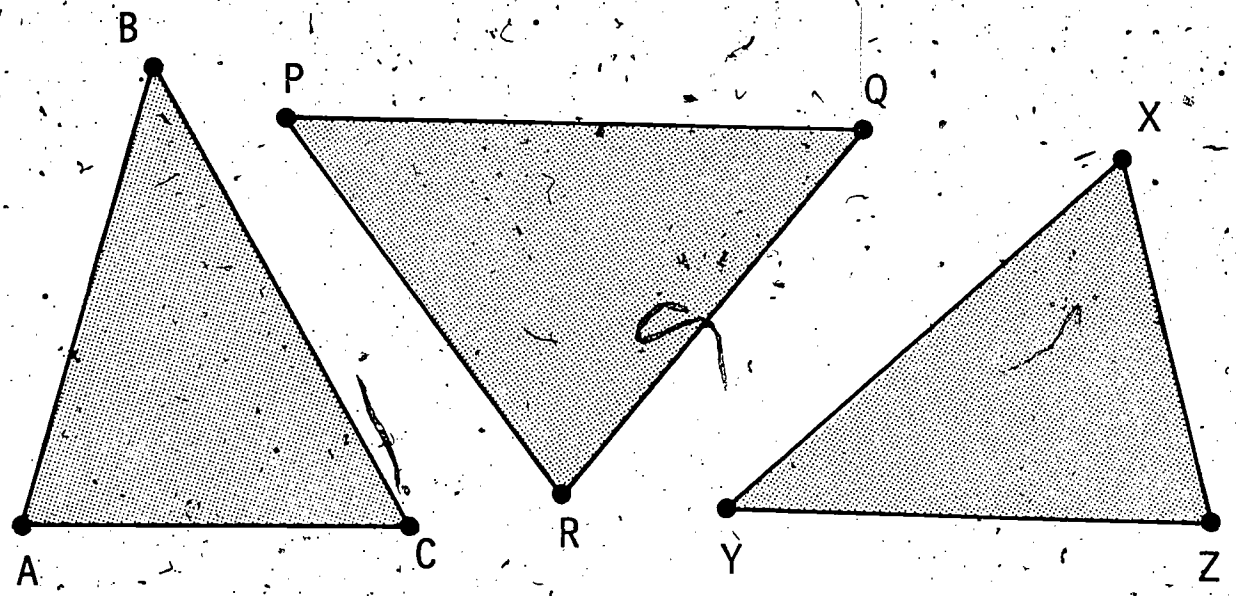
2.



3.



4. Make a tracing of $\triangle ABC$.
   Mark the points A, B, C on the tracing.



Line segment $\overline{AB}$ is congruent to _____ and to _____.

Line segment $\overline{BC}$ is congruent to _____.

Line segment $\overline{CA}$ is congruent to _____.

$\triangle ABC$ is congruent to _____.

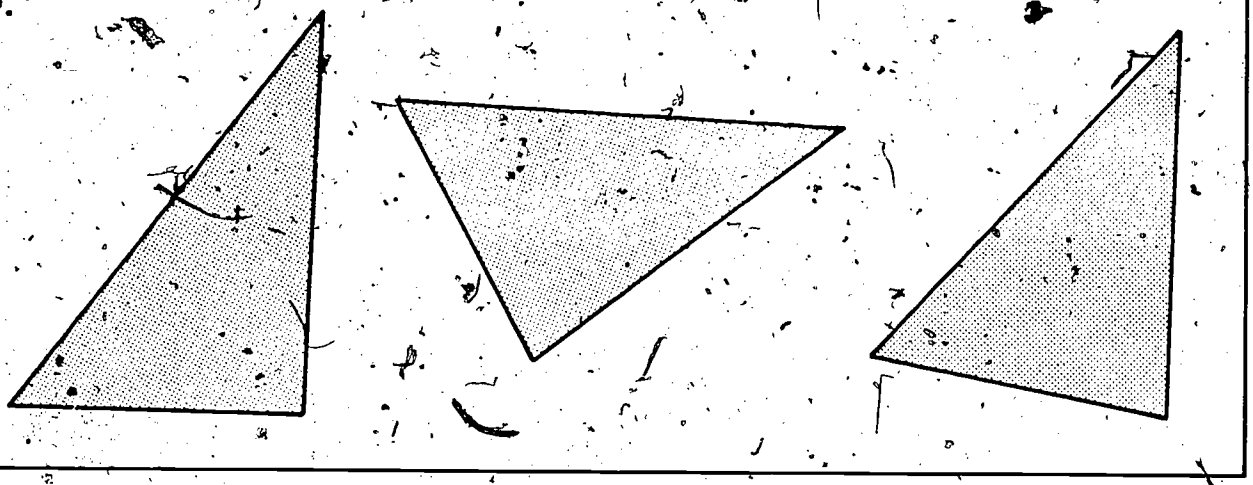
The inside of $\triangle ABC$ is congruent to the inside of _____.

The triangular region ABC is congruent to the triangular region _____.

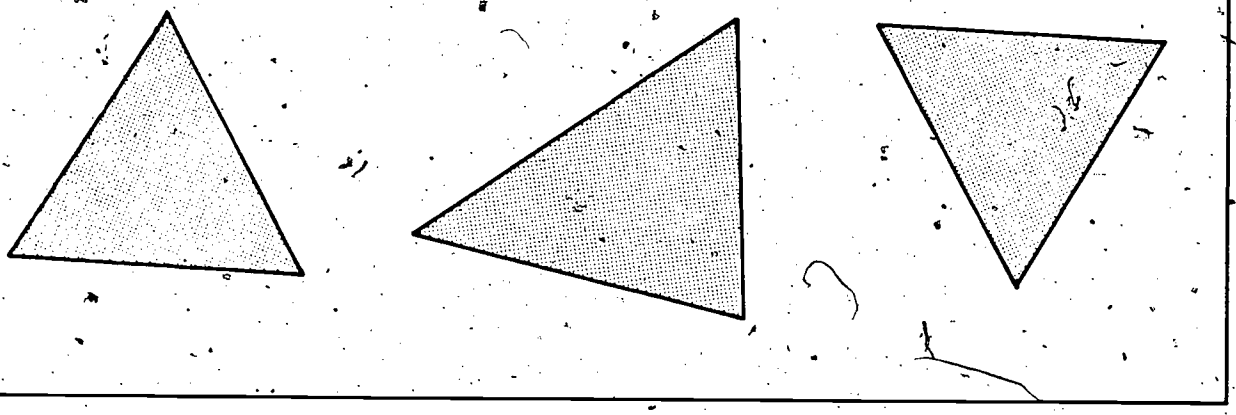
Congruence of Triangular Regions

In each row mark the two regions that are congruent.

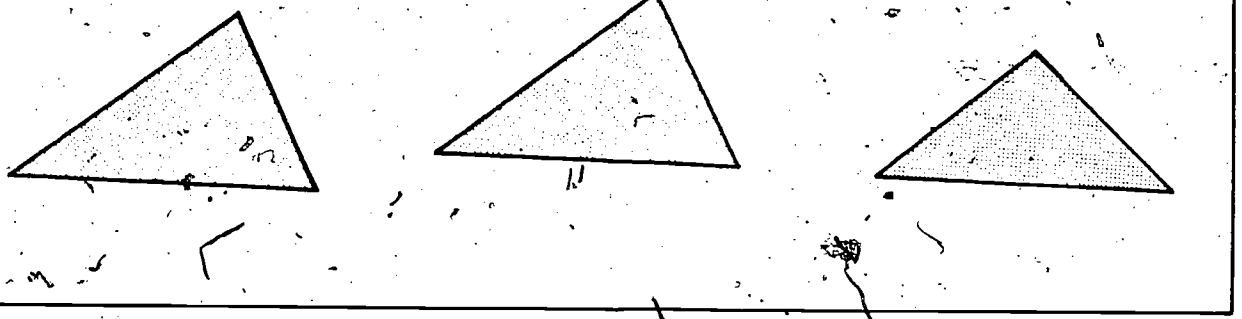
5.



6.

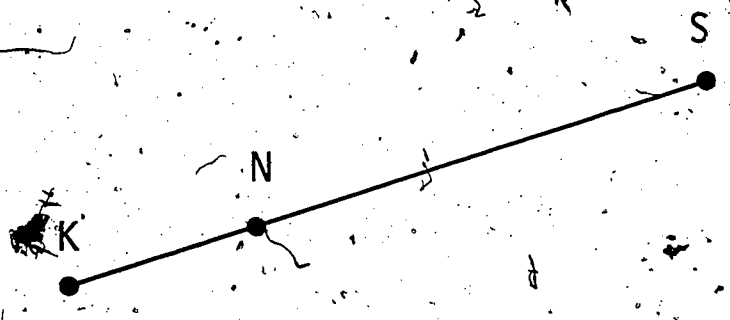


7.



Review

1. Line segment $\overline{KS}$ is shown below.

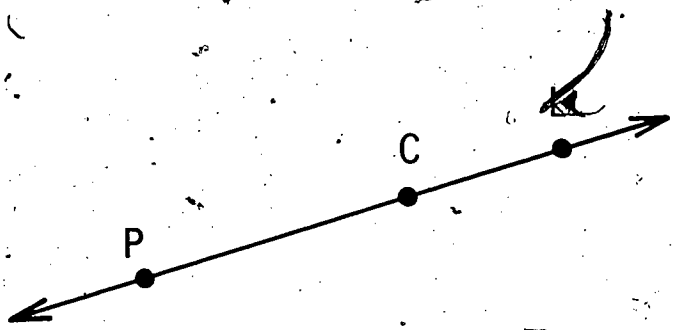


Write names for two other line segments. _____ _____

Is $\overline{KN}$ part of $\overline{KS}$? Yes No

Is $\overline{KN}$ part of $\overline{NS}$? Yes No

2. Line $\overleftrightarrow{CL}$ is shown below.

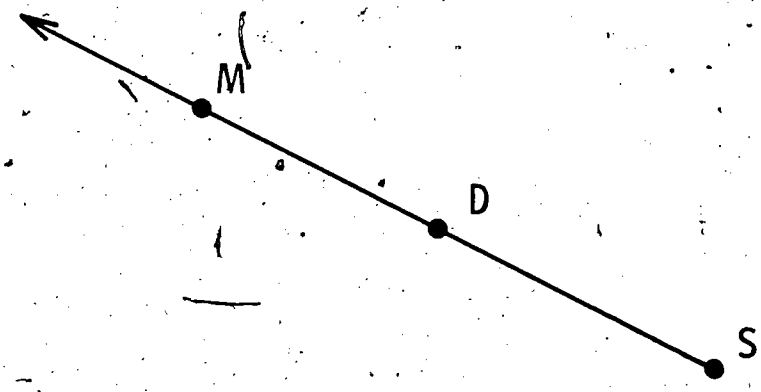


Write four more names for this line. _____ _____ _____ _____

Is line segment $\overline{CL}$ part of line $\overleftrightarrow{CL}$? Yes No

Is $\overline{PC}$ part of $\overleftrightarrow{CL}$? Yes No

1. Ray $\overrightarrow{SM}$ is shown below.



Write another name for $\overrightarrow{SM}$. _____

Name the endpoint of $\overrightarrow{SM}$. _____

Is the endpoint named first? Yes No

2. How many endpoints does a line segment have? None 1 2

How many endpoints does a line have? None 1 2

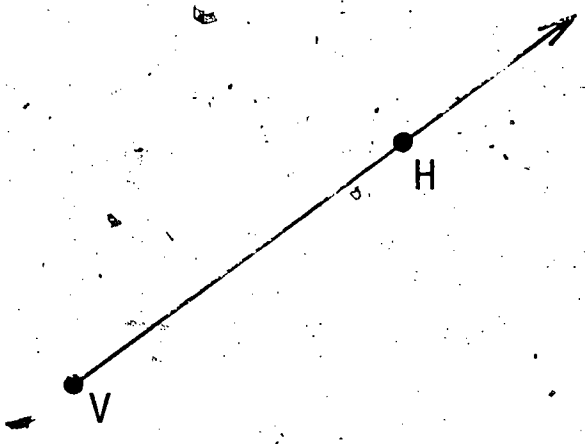
How many endpoints does a ray have? None 1 2

3. Here is ray VH.

Draw two more rays with V as endpoint.

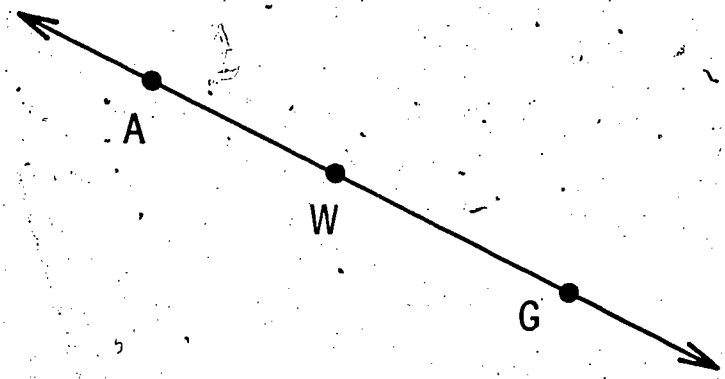
Mark another point F on one ray you drew.

Mark another point L on the other ray you drew.



Name the rays you drew. _____ _____

4. Here is line $\overleftrightarrow{AG}$.

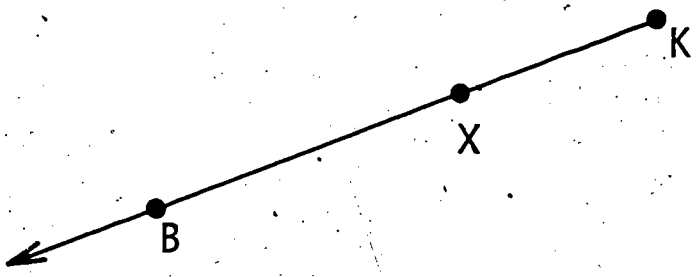


Is ray $\overrightarrow{GA}$ the same as ray $\overrightarrow{AG}$? Yes No

Is $\overrightarrow{AW}$ the same as $\overrightarrow{AG}$? Yes No

Is line segment $\overline{AW}$ part of ray $\overrightarrow{AG}$? Yes No

5. Here is ray $\overrightarrow{KB}$.

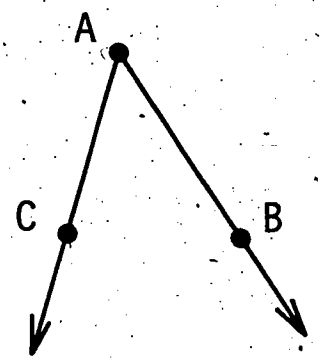


Is $\overrightarrow{XB}$ the same as $\overrightarrow{KB}$? Yes No

Is line segment $\overline{XB}$ part of ray $\overrightarrow{KB}$? Yes No

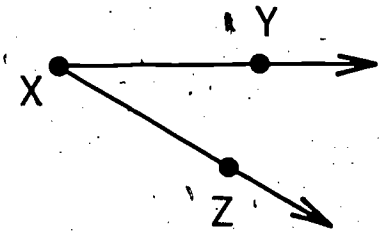
Is line segment $\overline{KB}$ part of ray $\overrightarrow{KB}$? Yes No

1. In each angle, name the vertex and the rays.



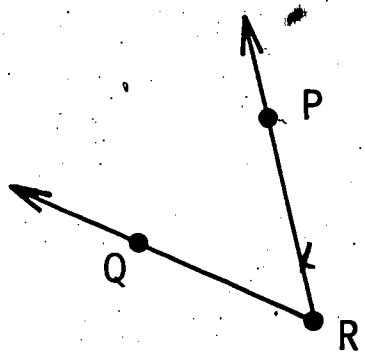
vertex _____

rays _____ _____



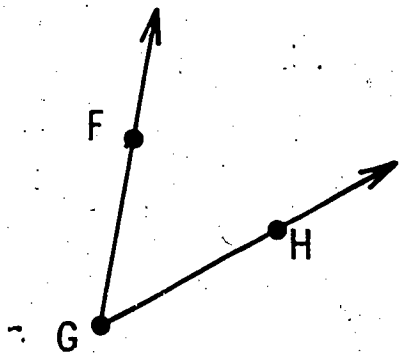
vertex _____

rays _____ _____



vertex _____

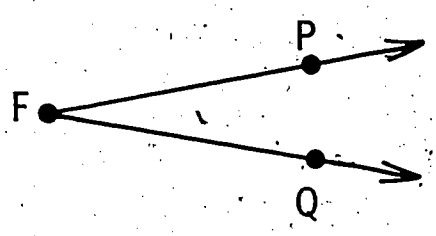
rays _____ _____



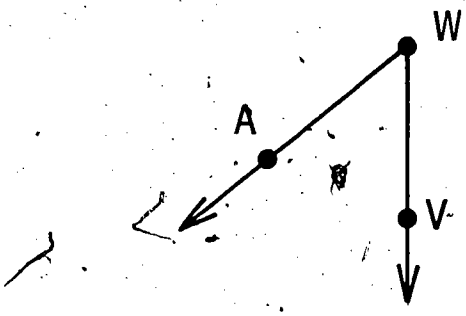
vertex _____

rays _____ _____

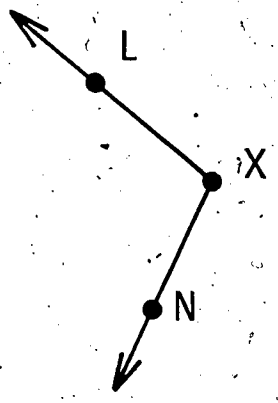
2. Write two names for each angle.



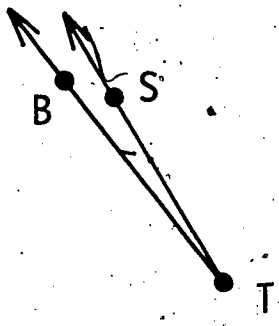
_____ _____



_____ _____



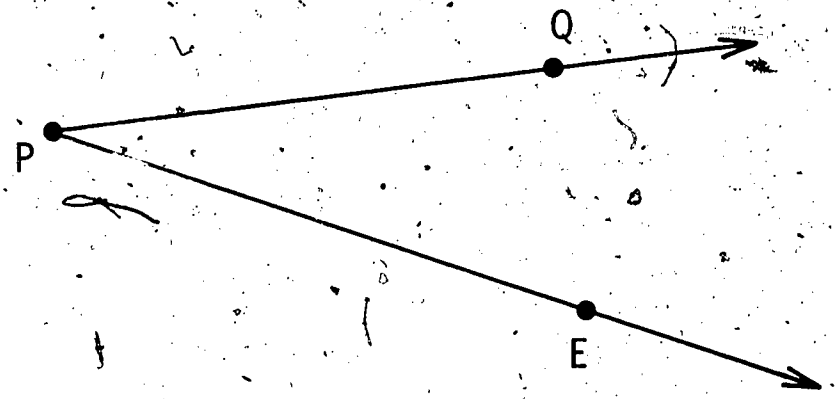
_____ _____



_____ _____

3. Name the vertex of the angle. _____

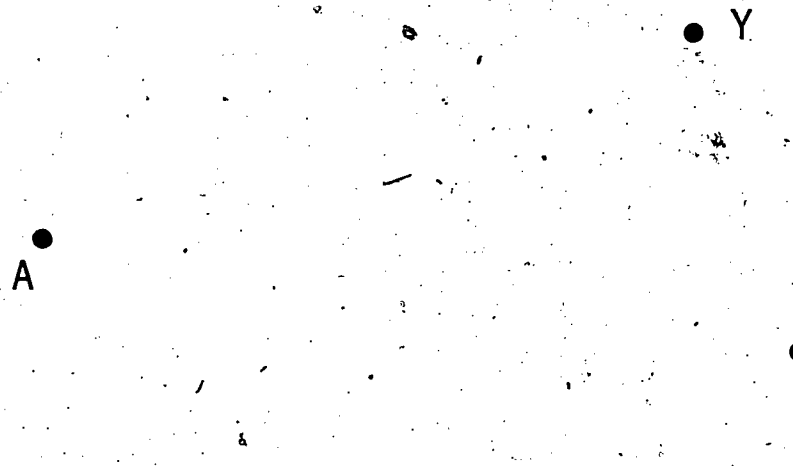
Write two names for the angle. _____ _____



Mark another point R on $\overrightarrow{PE}$.

Write two more names for the angle. _____ _____

4. Draw triangle △ AYK.

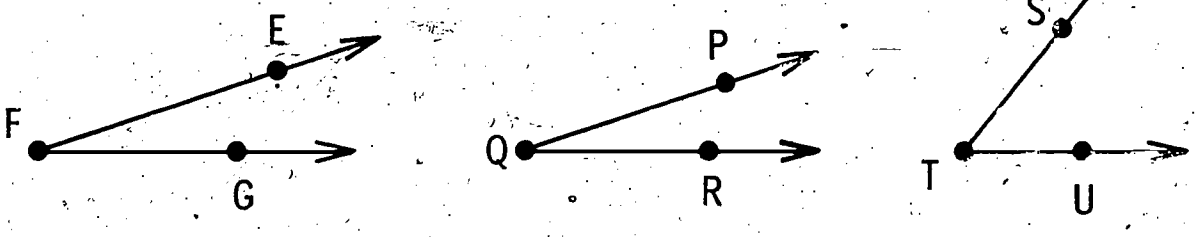


Name three angles whose corners are shown. _____ _____ _____

Congruence of Angles

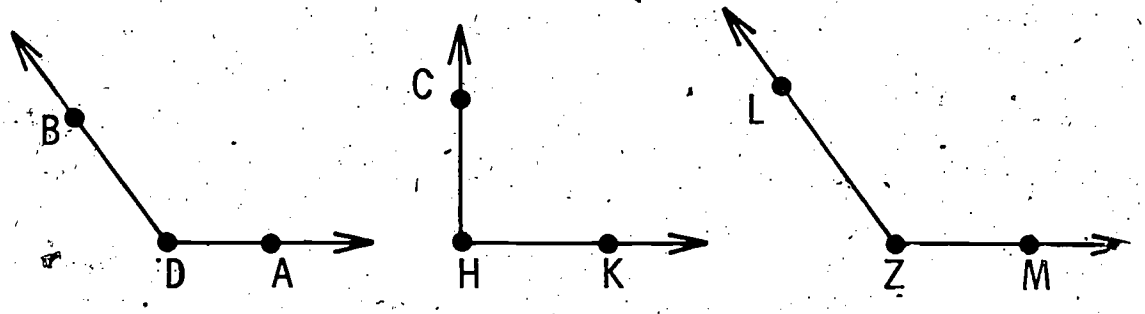
Find out by tracing.

1.



∠EFG is congruent with _____.

2.

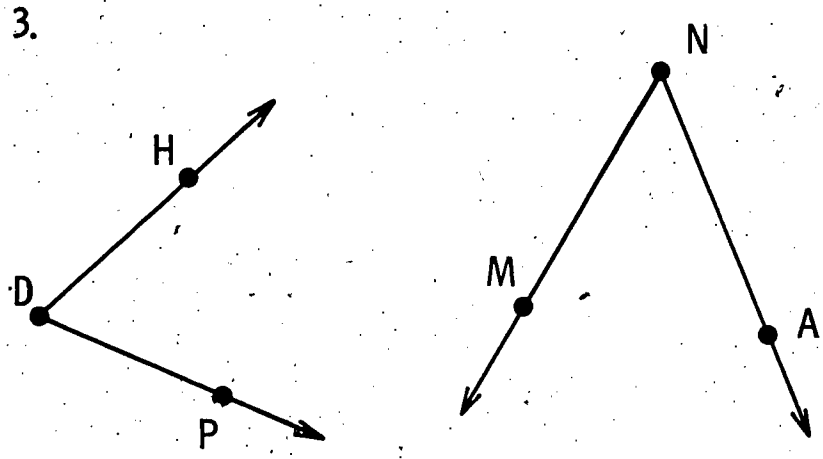


∠BDA is congruent with _____.

Congruence of Angles

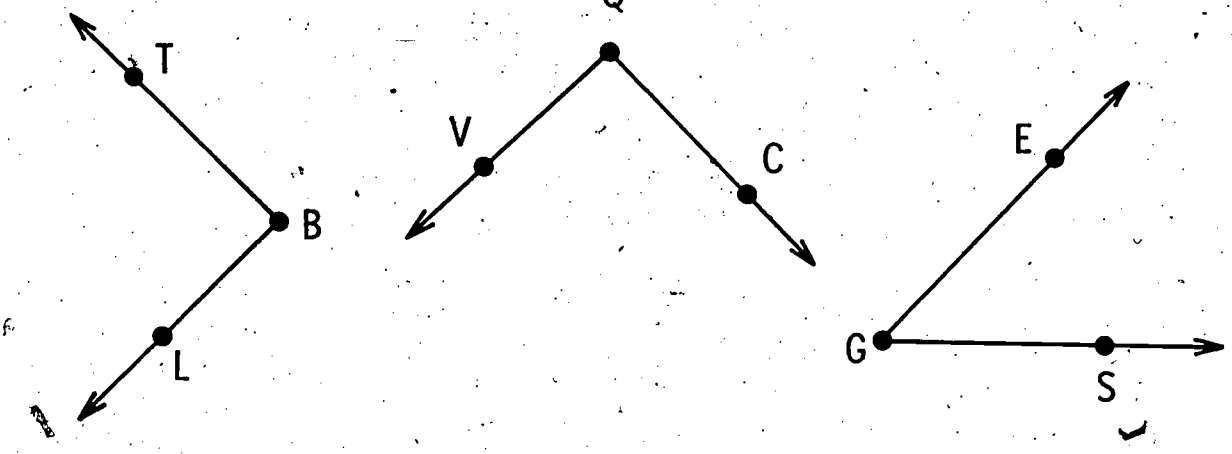
Find out by tracing.

3.



∠ HDP is congruent with _____.

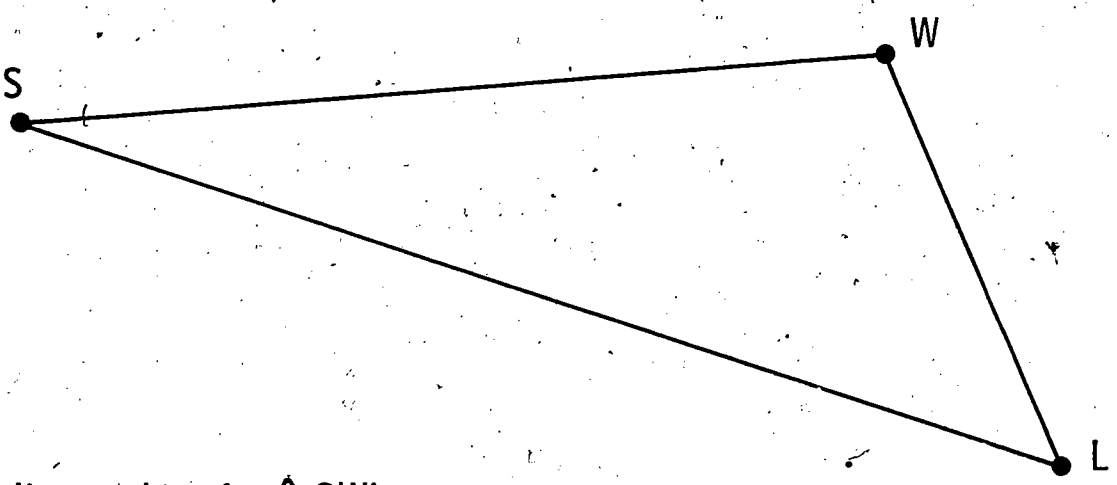
4.



∠ TBL is congruent with _____.

Congruence of Angles

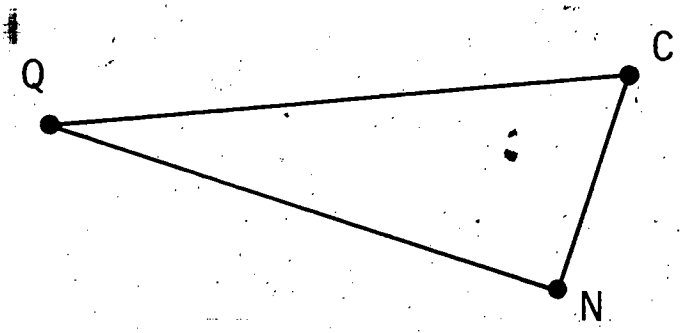
5.



Name the angles of $\triangle SWL$.

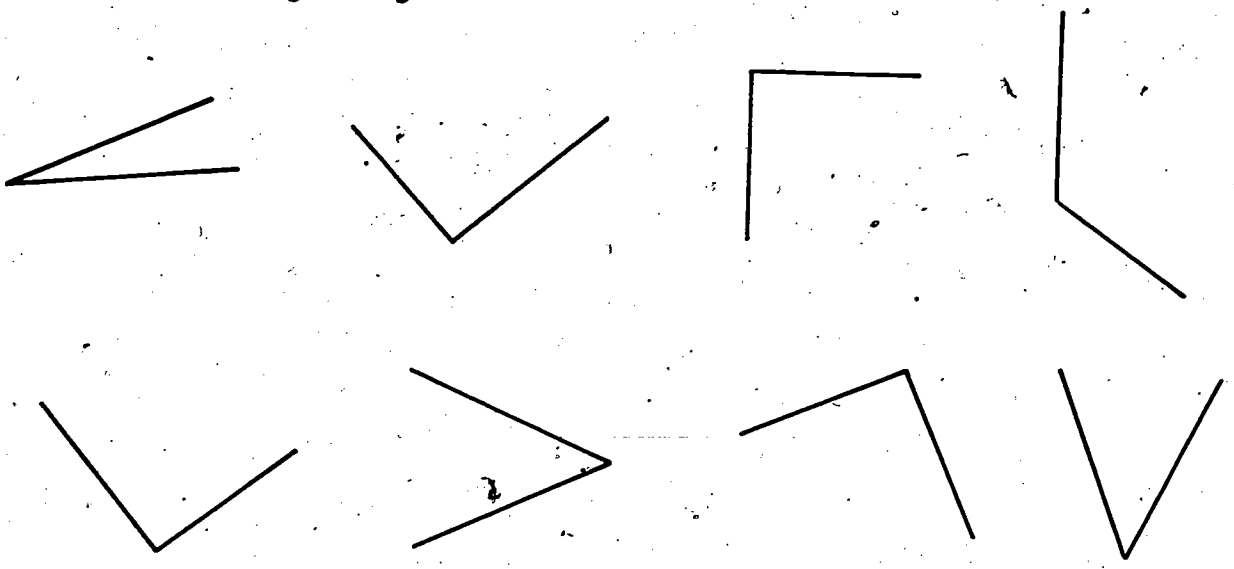
_____ _____ _____

6.

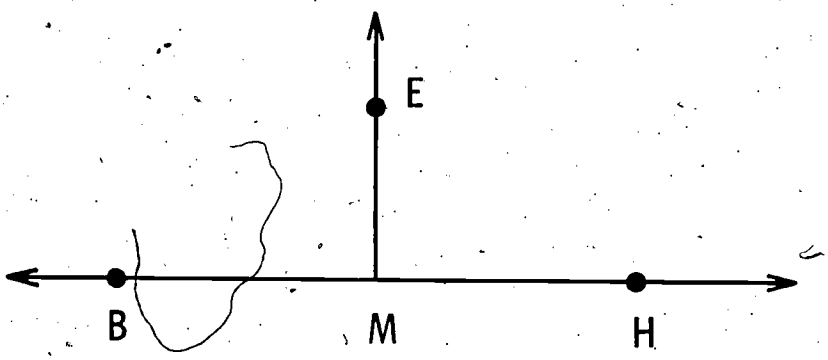


$\angle CQN$ is congruent with _____.

1. Mark each right angle.

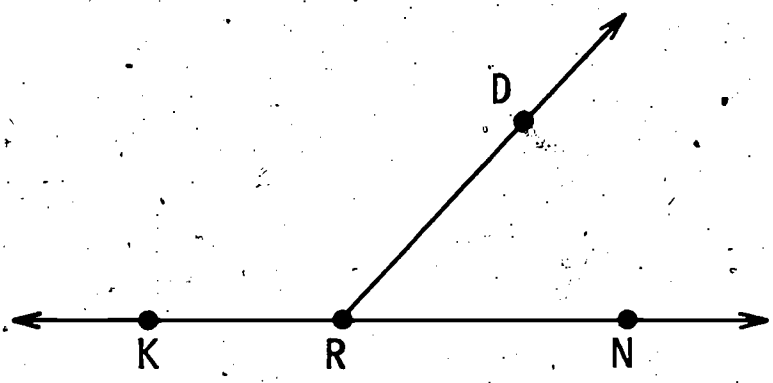


2.



Is ∠EMH congruent with ∠EMB?	Yes	No
Do B, M and H lie on a line?	Yes	No
Is ∠EMH a right angle?	Yes	No
Is ∠EMB a right angle?	Yes	No

3.



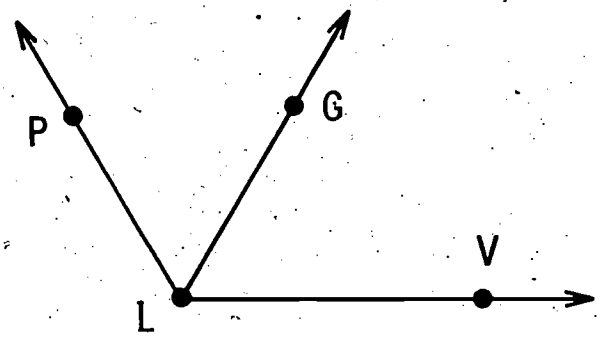
Do K, R, and N lie on a line? Yes No

Is ∠DRN congruent with ∠DRK? Yes No

Is ∠DRN a right angle? Yes No

Is ∠DRK a right angle? Yes No

4.



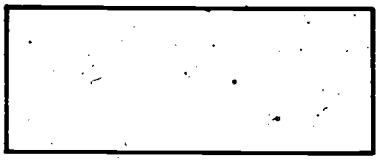
Is ∠GLV congruent with ∠GLP? Yes No

Do P, L, and V lie on a line? Yes No

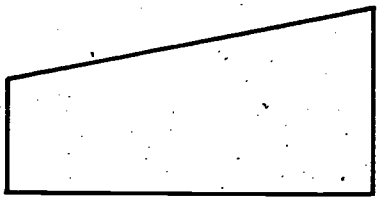
Is ∠GLV a right angle? Yes No

Is ∠GLP a right angle? Yes No

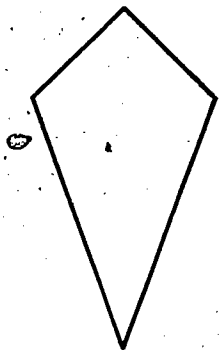
5. How many right angles does each polygon have?



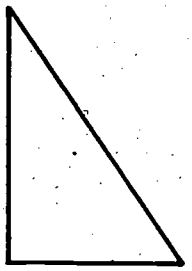
None 1 2 3 4



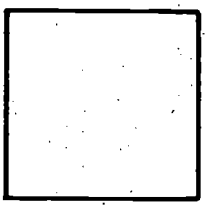
None 1 2 3 4



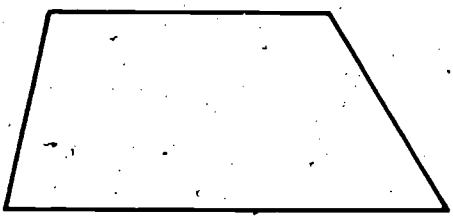
None 1 2 3 4



None 1 2 3 4

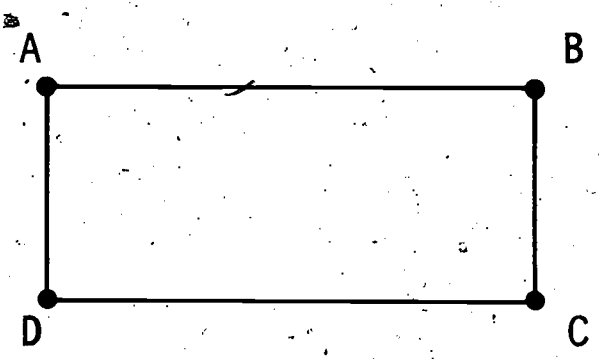


None 1 2 3 4



None 1 2 3 4

1. Here is a rectangle.



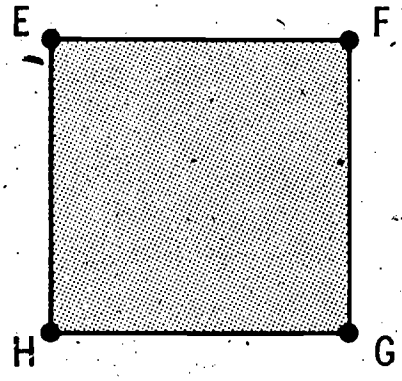
$\overline{AB}$ is congruent with _____.

$\overline{AD}$ is congruent with _____.

Is $\overline{AB}$ congruent with $\overline{AD}$? Yes No

Is the rectangle a square? Yes No

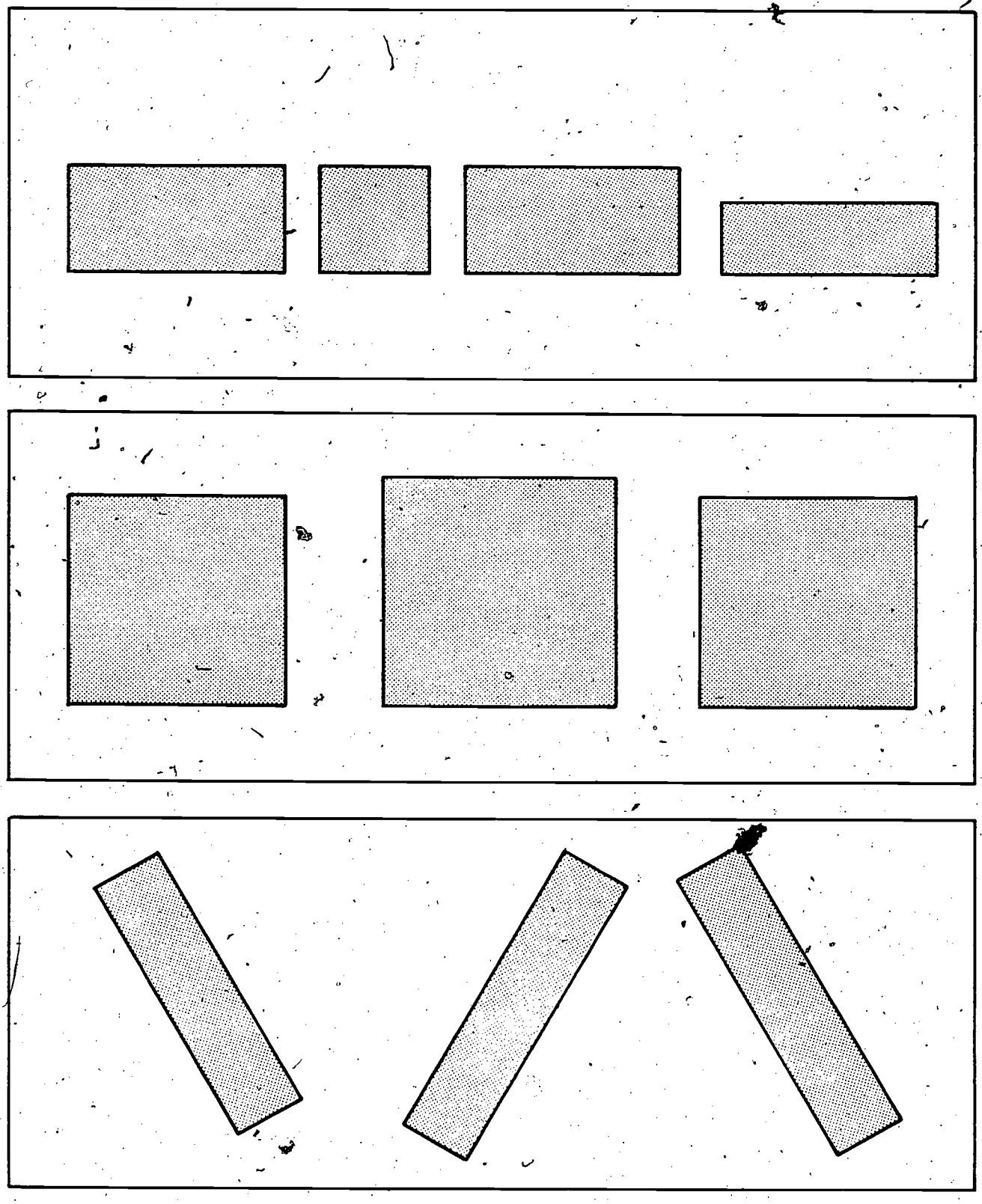
2. Here is a square region.



$\overline{EF}$ is congruent with _____, _____, and _____.

Regions

Mark the congruent rectangular regions.

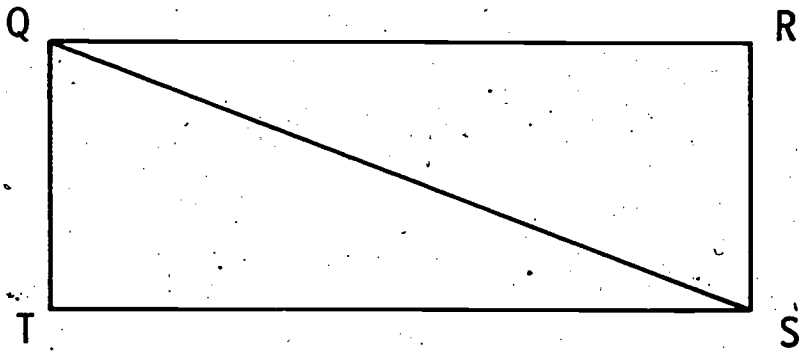


4. Here is a rectangular region.

Make a tracing of △QRS.

Mark the points Q, R, and S on the tracing.

Fit the tracing on △STQ.



$\overline{QR}$ is congruent with _____.

$\overline{RS}$ is congruent with _____.

∠RSQ is congruent with _____.

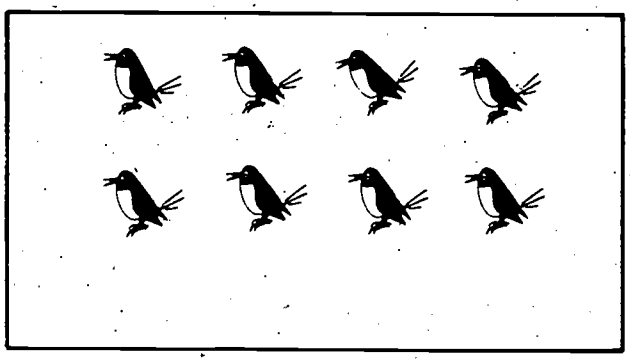
∠SQR is congruent with _____.

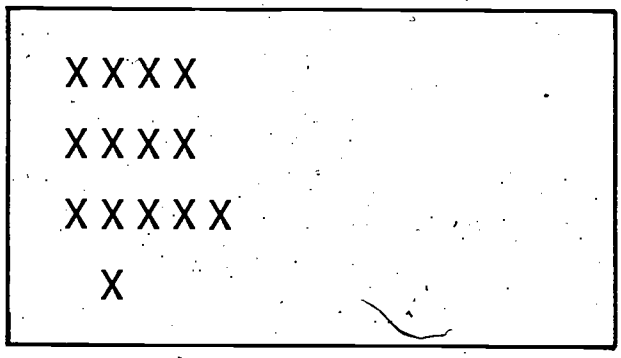
△QRS is congruent with _____.

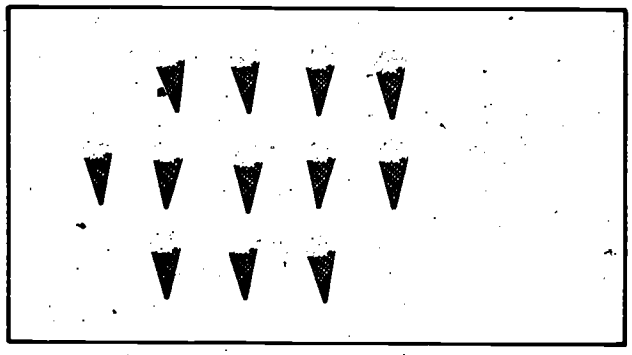
The triangular region QRS is congruent with the triangular region _____.

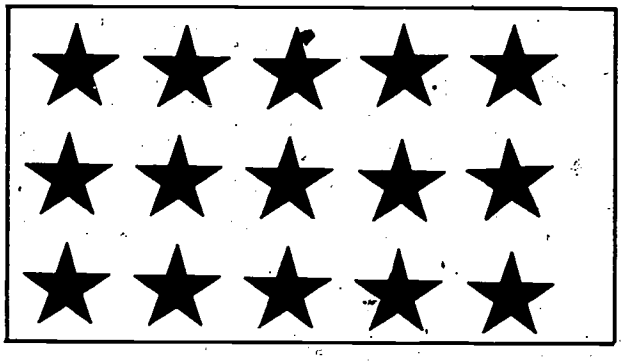
Arrays

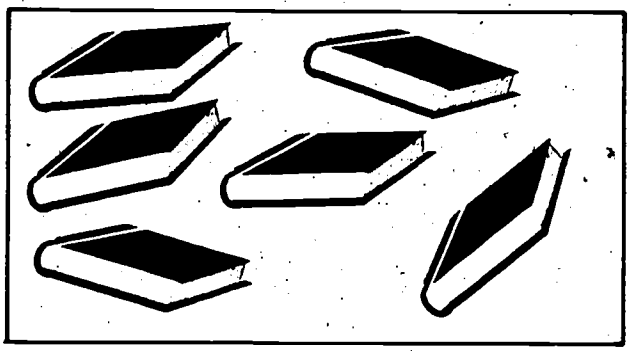
Cross out each picture below that does not show an array.

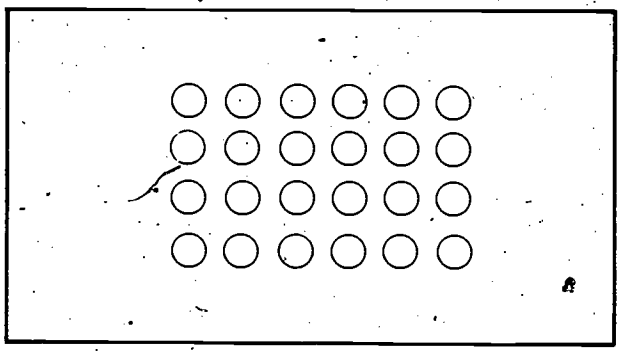


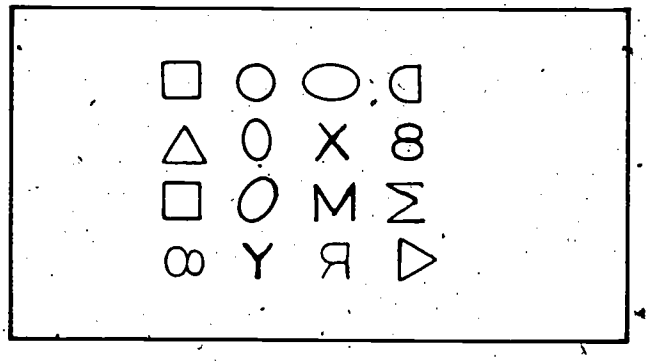


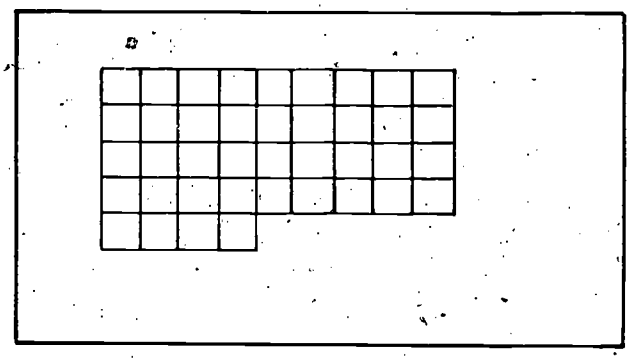






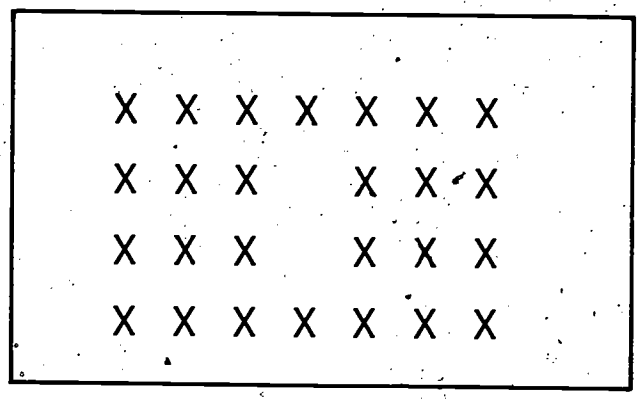


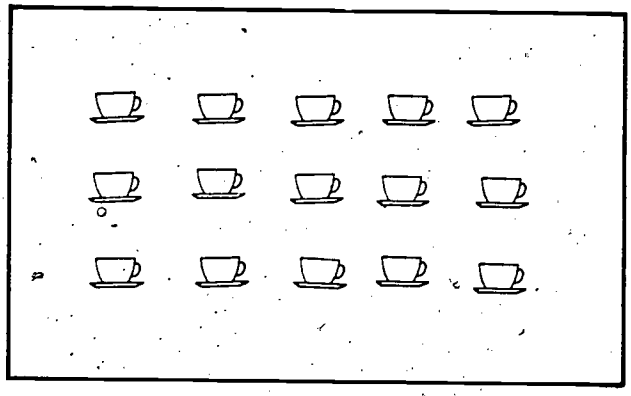


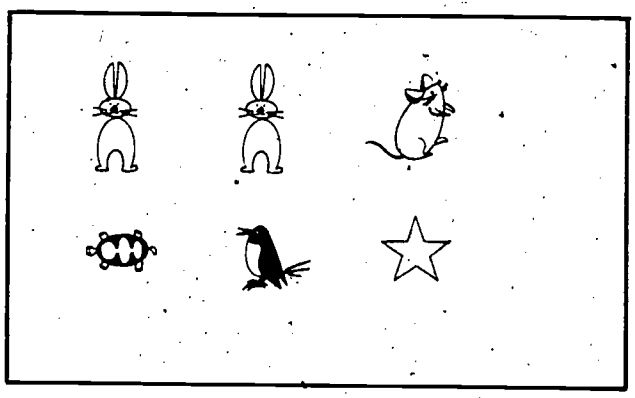


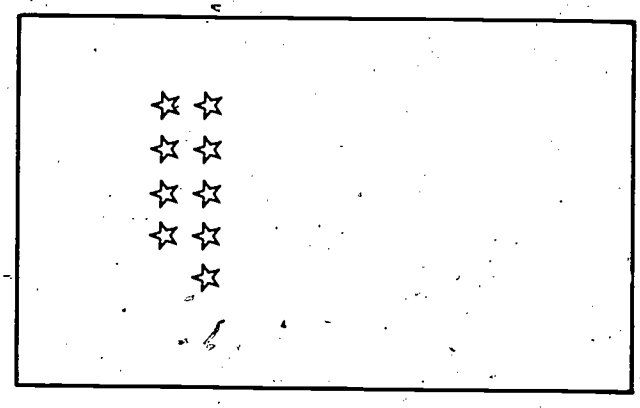
Arrays

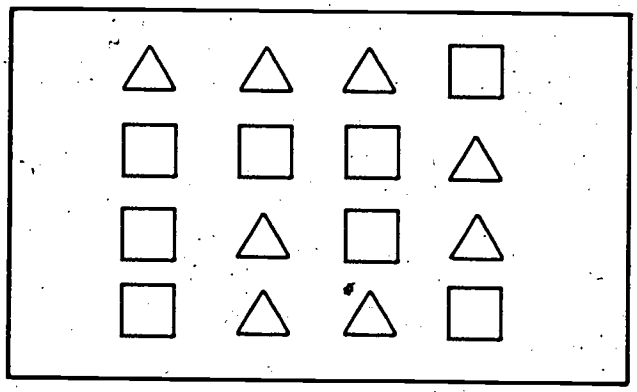
Cross out each picture below that does not show an array.

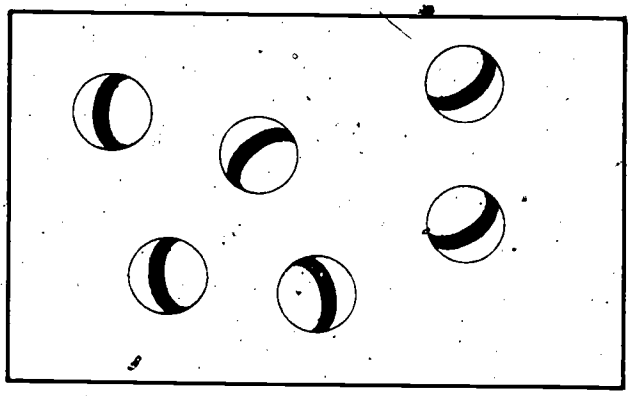


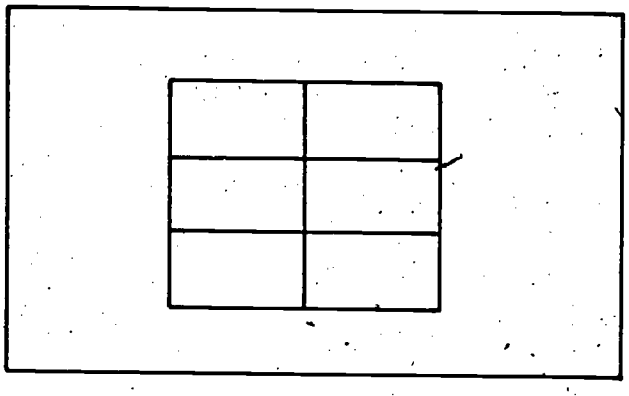






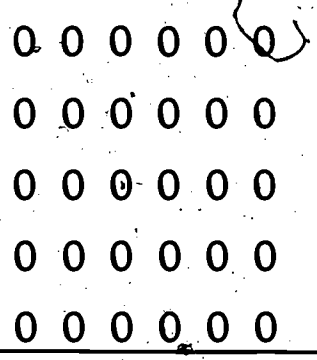




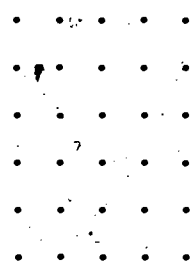


Arrays

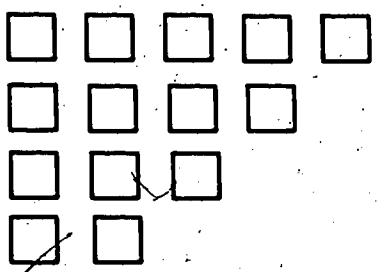
A



B



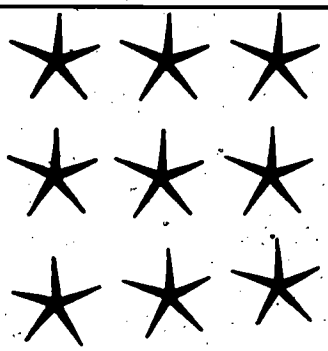
C



D

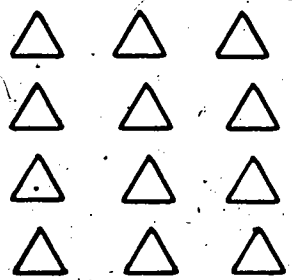
X X X X
X X X X
X X X X

E



F

G



H

X
X
X
X

Match each picture on page 218 with the sentences that describe it. Fill the blanks.

Picture _____ has 3 rows. There are 4 members in each row.

Picture _____ does not show an array. It does _____ have the same number of things in each row.

Picture _____ shows a 5 by 6 array. It has 5 rows and _____ members in each row.

Picture _____ shows a 6 by 5 array. It has _____ members in each row and _____ rows.

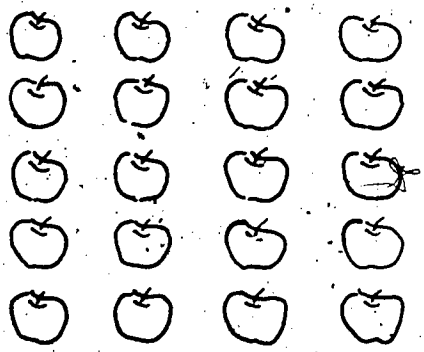
Picture _____ shows a 4 by 3 array. It has _____ rows and _____ members in each row.

Picture _____ shows a _____ by 1 array. It has _____ rows and _____ member in each row.

Picture _____ shows a 3 by 3 array. It has _____ members in each row and _____ rows.

Picture _____ shows a 1 by 4 array. It has _____ members in each row and _____ row.

Describing Arrays



Number of rows: _____

Number of members in each row: _____

This is a _____ by _____ array.

This array has _____ members.

X X X

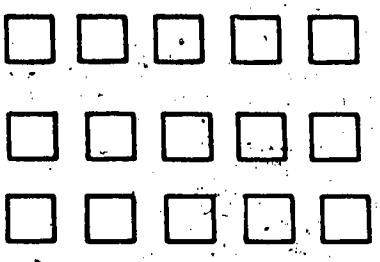
X X X

Number of rows: _____

Number of members in each row: _____

This is a _____ by _____ array.

This array has _____ members.

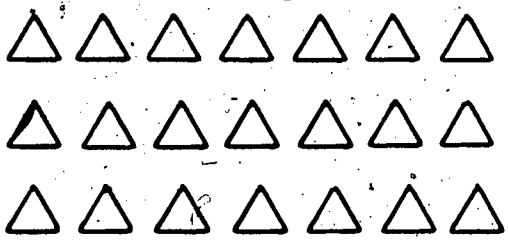


Number of members in each row: _____

Number of rows: _____

This is a _____ by _____ array.

This array has _____ members.



Number of members in each row: _____

Number of rows: _____

This is a _____ by _____ array.

This array has _____ members.

Showing Arrays

Draw:

An array that has 4 rows of X's with 5 X's in each row.

We call this a _____ by _____ array.

An array that has 3 X's in each row with 5 rows.

We call this a _____ by _____ array.

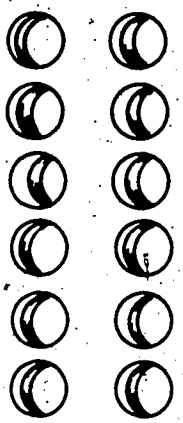
An array that has 6 rows of X's with 4 X's in each row.

We call this a _____ by _____ array.

An array that has 6 X's in each row with 3 rows.

We call this a _____ by _____ array.

Counting Members of Arrays



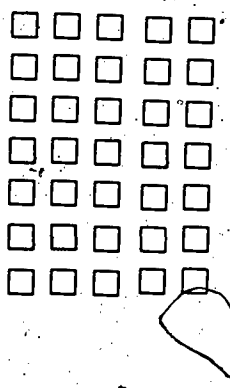
This is a _____ by _____ array.

Count by 2's.

___, ___, ___, ___, ___, ___

This array has _____ members.

2 + 2 + 2 + 2 + 2 + 2 = _____



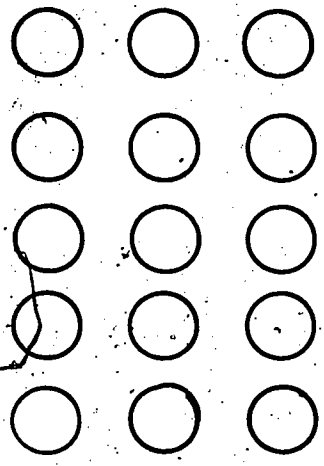
This is a _____ by _____ array.

Count by 5's.

___, ___, ___, ___, ___, ___, ___

This array has _____ members.

5 + 5 + 5 + 5 + 5 + 5 + 5 = _____



This is a _____ by _____ array.

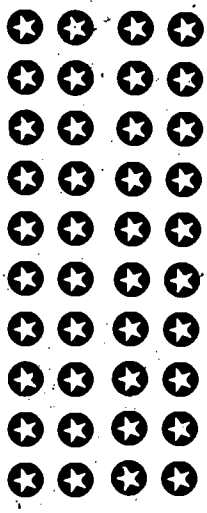
Count by 3's.

___, ___, ___, ___, ___

This array has _____ members.

3 + 3 + 3 + 3 + 3 = _____

Counting Members of Arrays



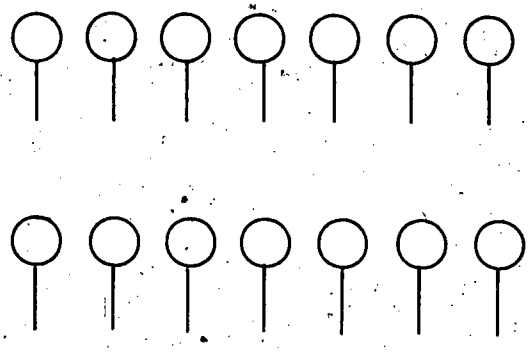
This is a _____ by _____ array.

Count by 4's.

____, ____, ____, ____, ____,

____, ____, ____, ____, ____

This array has _____ members.



This is a _____ by _____ array.

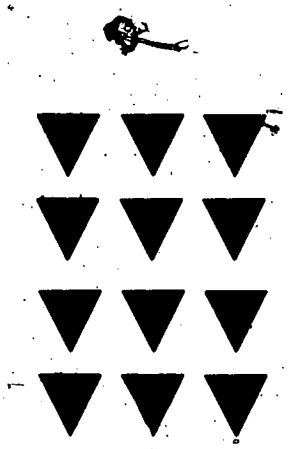
Count by 7's.

____, ____

This array has _____ members.

7 + 7 = _____

Equations



4 rows

3 members in each row

12 members in the array

Equation: 4 x 3 = 12

X X X X X

X X X X X

_____ rows

_____ members in each row

_____ members in the array

Equation: _____

X X X

X X X

X X X

X X X

X X X

X X X

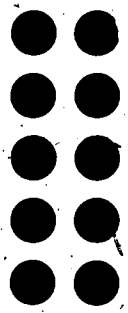
_____ rows

_____ members in each row

_____ members in the array

Equation: _____

Equations

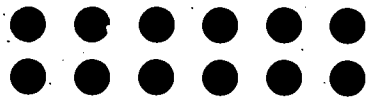


_____ rows

_____ members in each row

_____ members in the array

Equation: _____

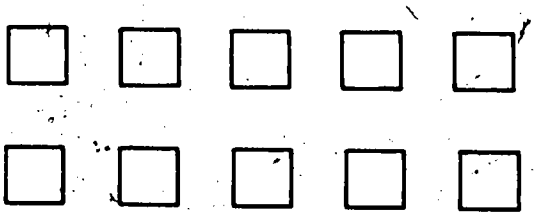


_____ rows

_____ members in each row

_____ members in the array

Equation: _____

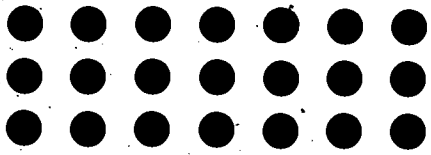


_____ rows

_____ members in each row

_____ members in the array

Equations: _____



_____ rows

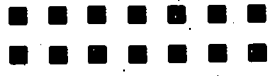
_____ members in each row

_____ members in the array

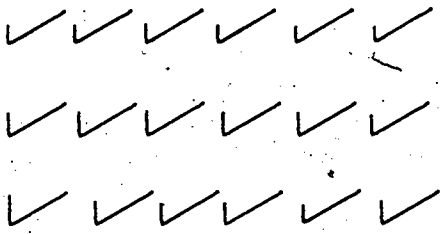
Equation: _____

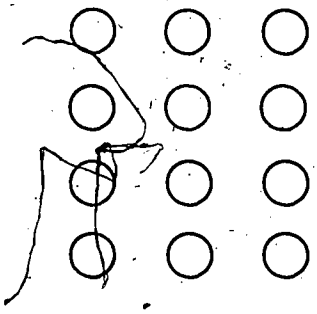
Multiplication Equations

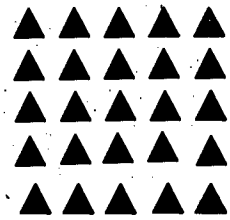
Write the equation for each array.

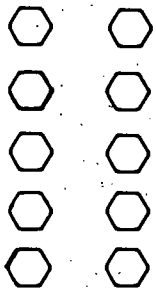


$2 \times 7 = 14$

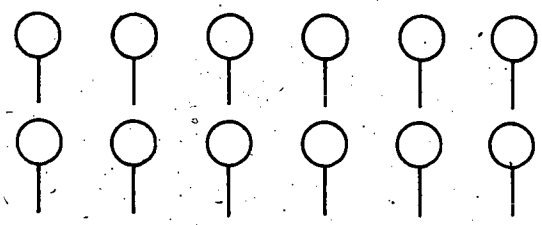








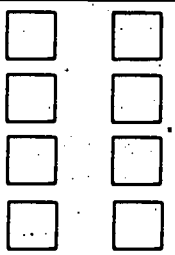
Products and Factors



Equation: _____

Product: _____

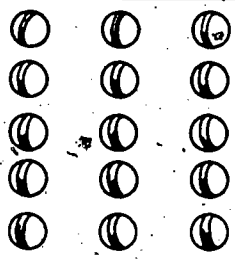
Factors: _____ and _____



Equation: _____

Product: _____

Factors: _____ and _____



Equation: _____

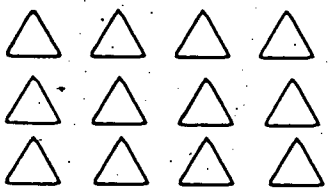
Product: _____

Factors: _____ and _____

Equation: _____

Product: _____

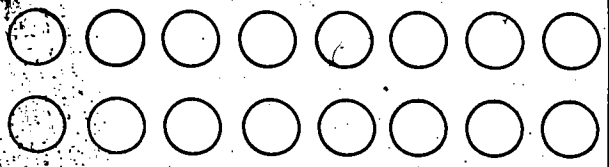
Factors: _____ and _____



Equation: _____

Product: _____

Factors: _____ and _____



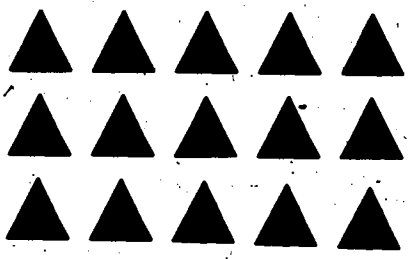
Equation: _____

Product: _____

Factors: _____ and _____

Products and Factors

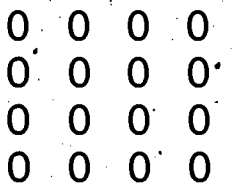
Fill the blanks.



Equation: _____

Product: _____

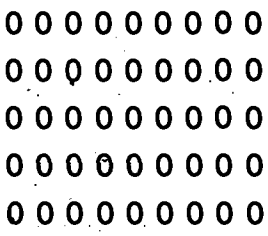
Factors: _____ and _____



Equation: _____

Product: _____

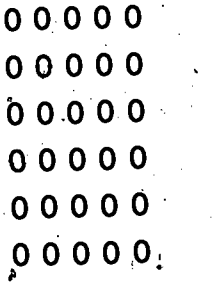
Factors: _____ and _____



Equation: _____

Product: _____

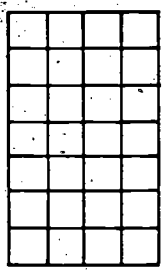
Factors: _____ and _____



Equation: _____

Product: _____

Factors: _____ and _____



Equation: _____

Product: _____

Factors: _____ and _____

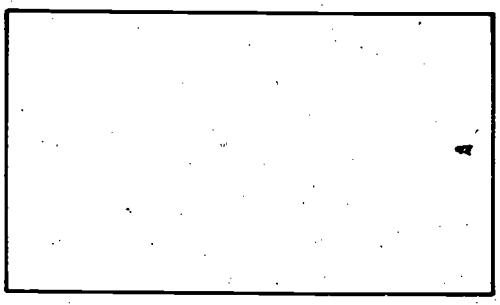
Equation: _____

Product: _____

Factors: _____ and _____

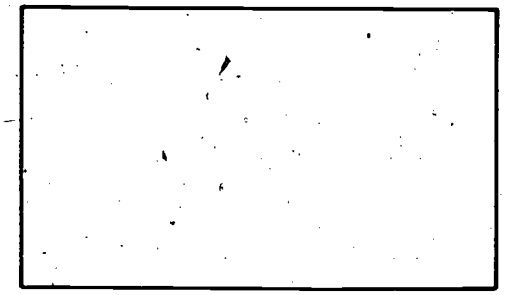
The Product of Two Factors

Draw a 6 by 3 array. Use X's.



$6 \times 3 =$ _____

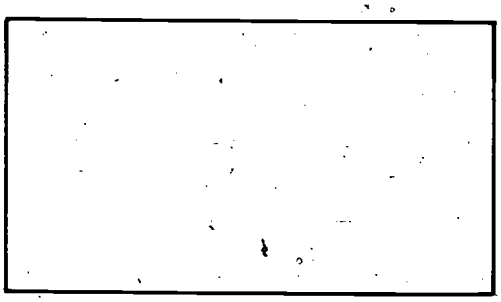
Draw a 3 by 6 array. Use X's.



$3 \times 6 =$ _____

Is $6 \times 3 = 3 \times 6$? _____

Draw a 4 by 5 array. Use X's.



$4 \times 5 =$ _____

Draw a 5 by 4 array. Use X's.

$5 \times 4 =$ _____

Is $4 \times 5 = 5 \times 4$? _____

★ Order in Factors

Fill the blanks.

$3 \times 5 = 5 + 5 + 5$ $3 \times 5 =$ _____	$5 \times 3 = 3 + 3 + 3 + 3 + 3$ $5 \times 3 =$ _____
$3 \times 5 = 5 \times$ _____	
$4 \times 2 = 2 + 2 + 2 + 2$ $4 \times 2 =$ _____	$2 \times 4 = 4 + 4$ $2 \times 4 =$ _____
$4 \times 2 =$ _____ $\times 4$	
$2 \times 5 = 5 + 5$ $2 \times 5 =$ _____	$5 \times 2 = 2 + 2 + 2 + 2 + 2$ $5 \times 2 =$ _____
$2 \times$ _____ $= 5 \times 2$	
$2 \times 9 = 18$ $9 \times 2 =$ _____	$8 \times 3 = 24$ $3 \times 8 =$ _____
$7 \times 4 = 28$ $4 \times$ _____ $= 28$	$2 \times 8 = 16$ $8 \times 2 =$ _____
$2 \times 6 = 12$ $6 \times$ _____ $= 12$	$2 \times 3 =$ _____ $3 \times 2 =$ _____

One As a Factor

Fill the blanks.

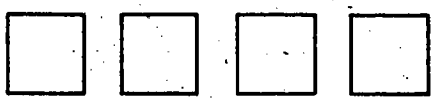
_____ rows

_____ member in each row

Equation: _____

Product: _____

Factors: _____ and _____



_____ row

_____ members in each row

Equation: _____

Product: _____

Factors: _____ and _____

_____ row

_____ members in each row

Equation: _____

Product: _____

Factors: _____ and _____

_____ rows

_____ member in each row

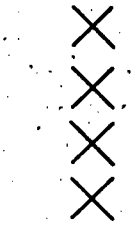
Equation: _____

Product: _____

Factors: _____ and _____

One As a Factor

Fill the blanks.



Equation: _____

Product: _____ Factors: _____ and _____

Equation: _____

Product: _____ Factors: _____ and _____

9 × 1 = _____

1 × 6 = _____

589 × 1 = _____

1 × _____ = 5

7 × _____ = 7

100 × 1 = _____

1 × _____ = 1

4 × 1 = _____

1 × 32 = _____

27 × 1 = _____

6 × _____ = 6

1 × _____ = 59

1 × 455 = _____

_____ × 1 = 1

Multiplication

Fill the blanks.

2 × 3 = _____	7 × 2 = _____	4 × 2 = _____
2 × 8 = _____	8 × 0 = _____	2 × 5 = _____
2 × 6 = _____	1 × 9 = _____	0 × 7 = _____
5 × 1 = _____	2 × 2 = _____	9 × 1 = _____
3 × 2 = _____	2 × 4 = _____	2 × 9 = _____
7 × 1 = _____	0 × 8 = _____	1 × 5 = _____
4 × 0 = _____	2 × 7 = _____	6 × 0 = _____
0 × 9 = _____	1 × 8 = _____	2 × 1 = _____

_____ × 6 = 0	5 × _____ = 10	1 × _____ = 7
4 × _____ = 4	92 × _____ = 0	468 × 1 = _____
_____ × 39 = 39	74 × 0 = _____	1 × _____ = 92
9 × 2 = _____	2 × _____ = 0	3 × _____ = 3
6 × 2 = _____	1 × _____ = 3	8 × 2 = _____

Using Arrays

This is a 2 by 6 array.

A A A A A A

A A A A A A

2 × 6 = _____

This is a 1 by 6 array.

Q Q Q Q Q Q

1 × 6 = _____

12 + 6 = _____

This is a 3 by 6 array.

D D D D D D

D D D D D D

D D D D D D

3 × 6 = _____

This is a 4 by 9 array.

B B B B B B B B B

B B B B B B B B B

B B B B B B B B B

B B B B B B B B B

4 × 9 = _____

Show how it can be separated into a 3 by 9 array and a 1 by 9 array.

A 3 by 9 array has _____ members.

A 1 by 9 array has _____ members.

27 + 9 = _____

This is a 4 by 5 array.

W W W W W
W W W W W
W W W W W
W W W W W

4 × 5 = _____

Show how it can be separated into a 4 by 3 array and a 4 by 2 array.

4 × 3 = _____ 4 × 2 = _____

12 + 8 = _____

This is a 3 by 7 array.

G G G G G G G
G G G G G G G
G G G G G G G

3 × 7 = _____

Show how it can be separated into a 3 by 5 array and a 3 by 2 array.

3 × 5 = _____ 3 × 2 = _____

15 + 6 = _____

Draw arrays to find the products.

Use X's.

2 × 6 = _____	2 × 9 = _____
1 × 6 = _____	1 × 9 = _____
3 × 6 = _____	3 × 9 = _____
2 × 7 = _____	2 × 4 = _____
1 × 7 = _____	1 × 4 = _____
3 × 7 = _____	3 × 4 = _____

★ Multiplication. Fill the blanks.

2 × 8 = _____	2 × 4 = _____	1 × 6 = _____
1 × 8 = _____	1 × 4 = _____	2 × 6 = _____
3 × 8 = _____	3 × 4 = _____	3 × 6 = _____
1 × 5 = _____	2 × 7 = _____	2 × 9 = _____
2 × 5 = _____	1 × 7 = _____	1 × 9 = _____
3 × 5 = _____	3 × 7 = _____	3 × 9 = _____
2 × 3 = _____	2 × 1 = _____	2 × 2 = _____
1 × 3 = _____	1 × 1 = _____	1 × 2 = _____
3 × 3 = _____	3 × 1 = _____	3 × 2 = _____

Fill the boxes:

×	5	9	7	4	10	8	3	6	2
3									

×	5	9	7	4	10	8	3	6	2
2									

×	2	1	3
8			

×	3	1	2
9			

★ Show on the table:

products with 2 as a factor.

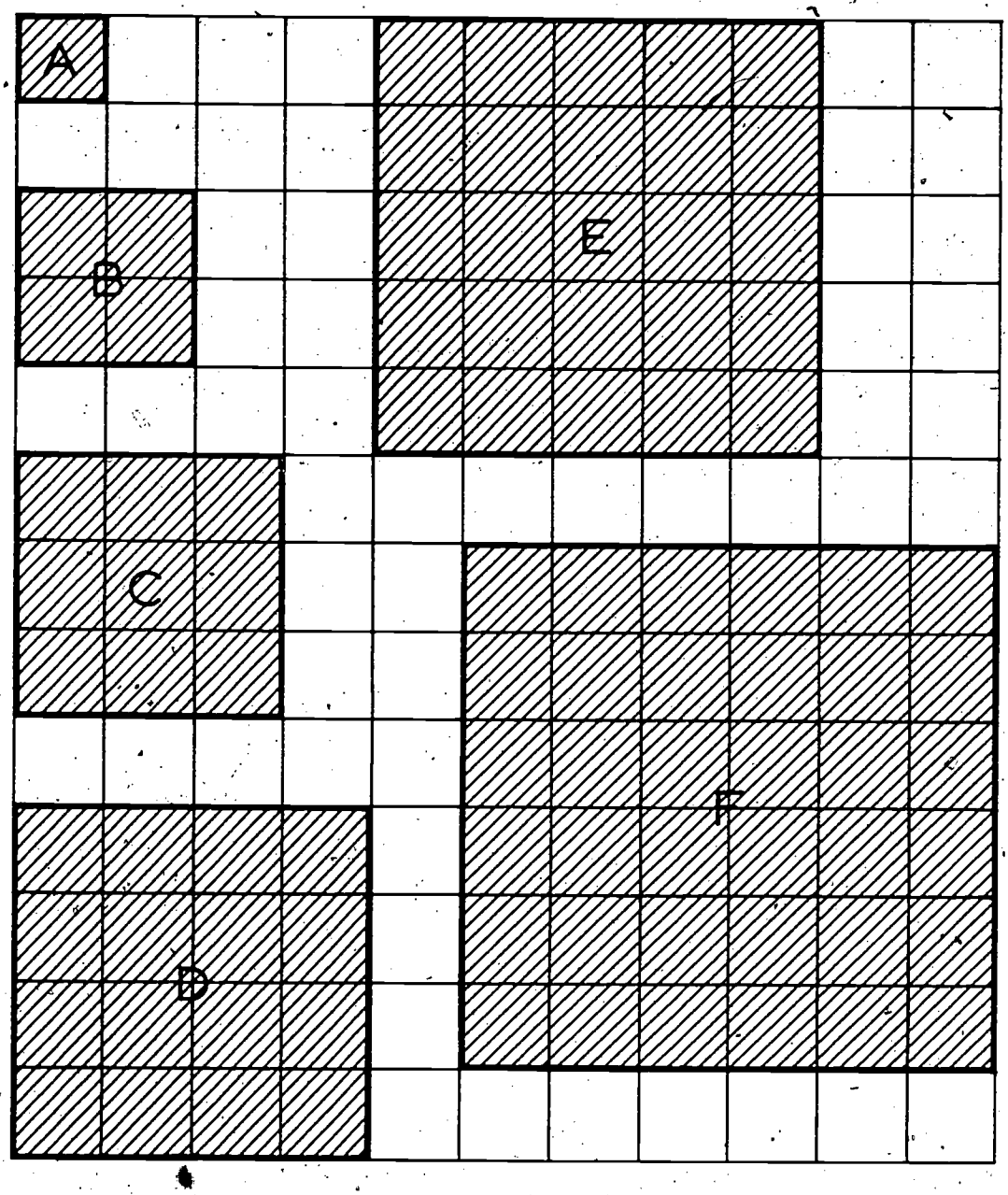
products with 0 as a factor.

products with 5 as a factor.

×	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

Show any other products you know.

★ A Special Kind of Array



Write equations suggested by the above arrays:

A. _____ D. _____

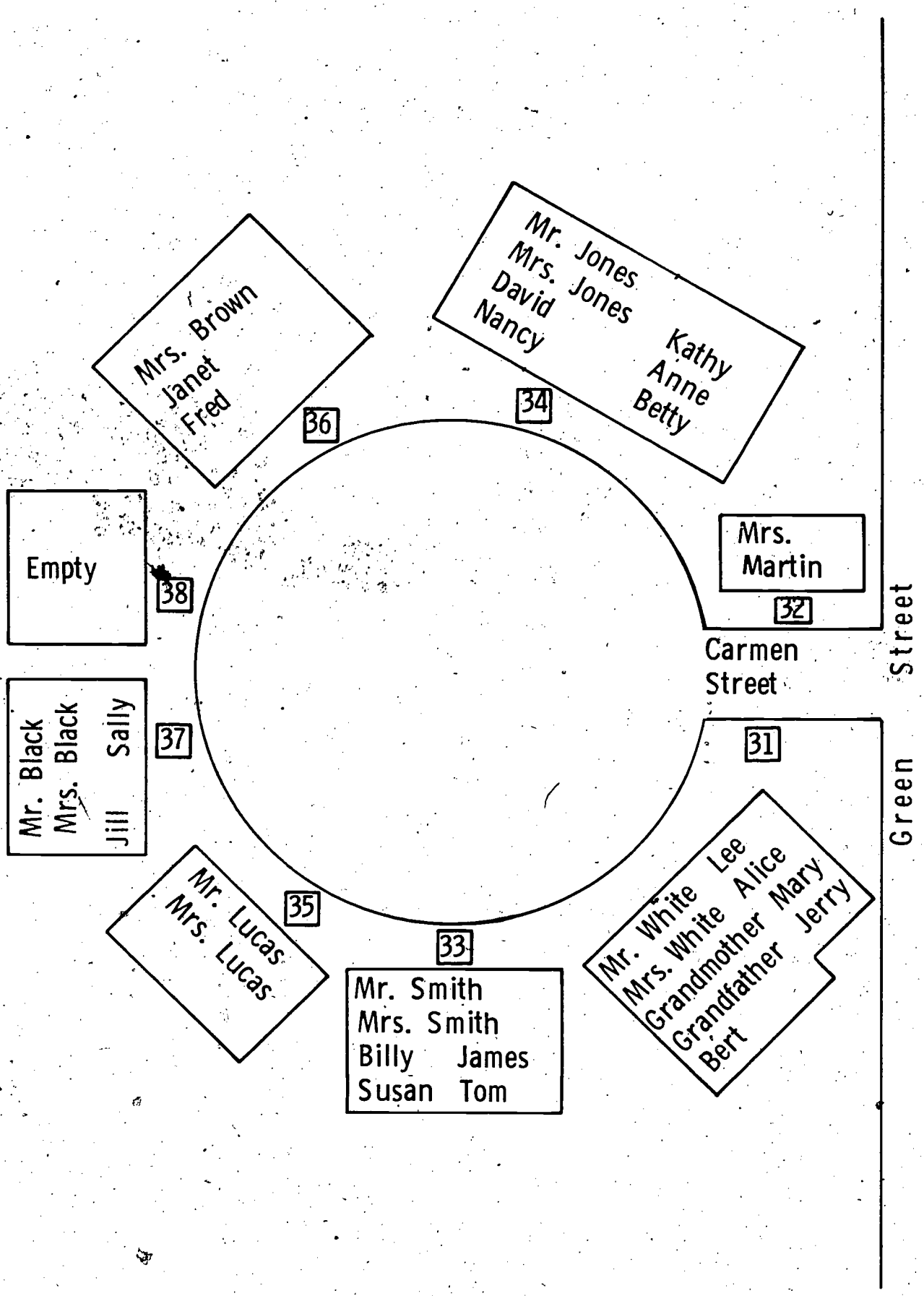
B. _____ E. _____

C. _____ F. _____

In each equation, the same factor is used _____ times.

Each array is a special kind of rectangle called a _____.

250


Mrs. Brown
Janet
Fred
36
Mr. Jones
Mrs. Jones
David
Nancy
Kathy
Anne
Betty
34
Empty
38
Mrs.
Martin
32
Carmen
Street
Street
Mr. Black
Mrs. Black
Jill
Sally
37
31
Green
Mr. Lucas
Mrs. Lucas
35
33
Mr. White
Lee
Mrs. White
Alice
Grandmother
Mary
Grandfather
Jerry
Bert
Mr. Smith
Mrs. Smith
Billy
James
Susan
Tom

Christmas on Carmen Street

Mrs. Martin baked Christmas cookies. She wanted to send 5 cookies to every person on Carmen Street. How many cookies did she send to each house?

_____ cookies to [31]

_____ cookies to [33]

_____ cookies to [35]

_____ cookies to [37]

_____ cookies to [36]

_____ cookies to [34]

_____ cookies to [38]

How many cookies did she send in all? _____

Mrs. Jackson used to live at 38 Carmen St. She mailed boxes of candy to all the people who were her neighbors. She sent 3 pieces of candy for each person. How many pieces did she send to each house?

_____ pieces to [31]

_____ pieces to [33]

_____ pieces to [35]

_____ pieces to [37]

_____ pieces to [32]

_____ pieces to [34]

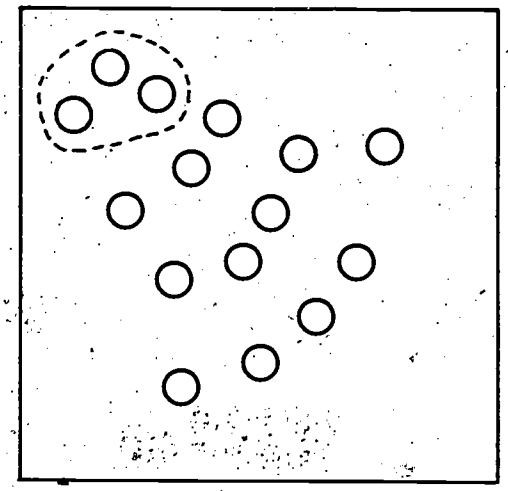
_____ pieces to [36]

_____ pieces to [38]

How many pieces did she send in all? _____

Partitioning Sets

Find the number of rows.



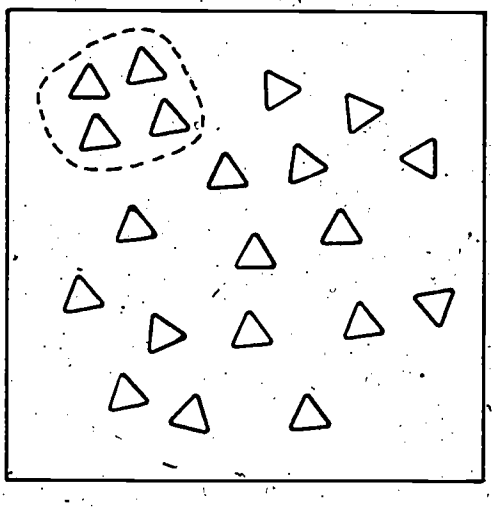
This set has 15 members.

Draw an array.

○○○

There are _____ threes in 15.

_____ × 3 = 15



This set has 20 members.

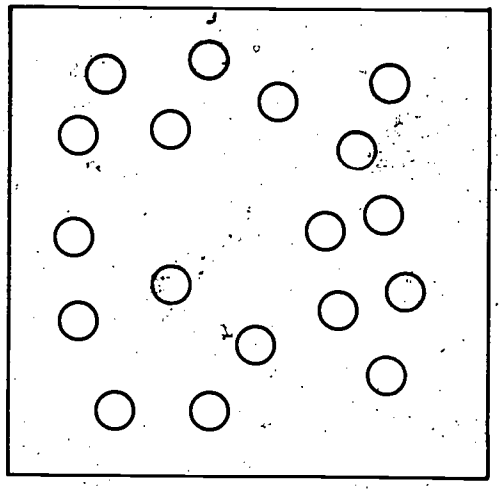
Draw an array.

△△△△

There are _____ fours in 20.

_____ × 4 = 20

Find the number of members in each row.



This set has 18 members.

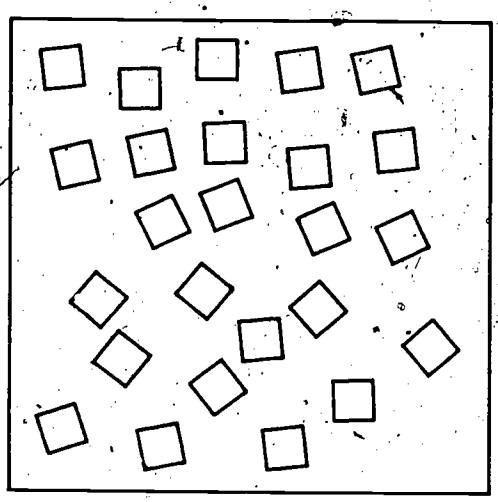
Draw an array.

○

○

○

3 × _____ = 18



This set has 25 members.

Draw an array.

□

□

□

□

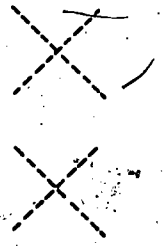
□

5 × _____ = 25

Use X's to draw arrays.

An array has 14 members.

It has 2 rows.



Equation: 2 × _____ = 14

An array has 21 members.

It has 7 members in each row.

Equation: _____ × 7 = 21

An array has 24 members.

It has 6 members in each row.

Equation: _____ = 24

The Quotient of Two Numbers

Draw an array. Use X's.

Fill the blanks.

_____ × 6 = 12

$\frac{12}{6}$ = _____

X X X X X X

X X X X X X

---

2 × _____ = 8

$\frac{8}{2}$ = _____

X X X X

X X X X

_____ × 9 = 18

$\frac{18}{9}$ = _____

_____ × 7 = 21

$\frac{21}{7}$ = _____

---

5 × _____ = 15

$\frac{15}{5}$ = _____

The Quotient of Two Numbers

Draw arrays. Use X's.

Fill the blanks.

$3 \times \_\_\_\_\_ = 9$

$\frac{9}{3} = \_\_\_\_\_$

$5 \times \_\_\_\_\_ = 30$

$\frac{30}{5} = \_\_\_\_\_$

$\_\_\_\_\_ \times 4 = 20$

$\frac{20}{4} = \_\_\_\_\_$

$\_\_\_\_\_ \times 2 = 14$

$\frac{14}{2} = \_\_\_\_\_$

$8 \times \_\_\_\_\_ = 24$

$\frac{24}{8} = \_\_\_\_\_$

Using Subtraction

How many times do you subtract?

$\frac{27}{9} =$ _____

27
- 9

18
- 9

0

$\frac{32}{8} =$ _____

32
- 8

$\frac{15}{5} =$ _____

15
- 5

$\frac{14}{7} =$ _____

14
- 7

$\frac{30}{5} =$ _____

30
- 5

$\frac{28}{4} =$ _____

28
- 4

Using Addition or Subtraction

Add to find the answer.

$3 \times 32 =$ _____ $32 + 32 + 32$	$4 \times 21 =$ _____ $21 + 21 + 21 + 21$
$2 \times 65 =$ _____ $65 + 65$	$3 \times 34 =$ _____ $34 + 34 + 34$

Subtract to find the answer.

$98 - 49 =$ _____ $98 - 49 - 49$	$84 - 12 =$ _____ $84 - 12$

Finding Quotients

Find n. Use multiplication facts, arrays, or subtraction.

$n \times 6 = 18$ $n = \frac{18}{6}$ n = _____	$n \times 1 = 14$ $n = \frac{14}{1}$ n = _____
$8 \times n = 24$ $n = \frac{24}{8}$ n = _____	$n \times 62 = 62$ $n = \frac{62}{62}$ n = _____
$n \times 5 = 45$ $n = \frac{45}{5}$ n = _____	$1 \times n = 97$ $n = \frac{97}{1}$ n = _____
$2 \times n = 18$ $n = \frac{18}{2}$ n = _____	$75 \times n = 75$ $n = \frac{75}{75}$ n = _____

Finding Quotients
Fill the blanks.

$\frac{27}{9} =$ _____

$\frac{50}{10} =$ _____

$\frac{20}{2} =$ _____

$\frac{12}{4} =$ _____

$\frac{16}{4} =$ _____

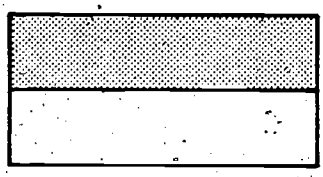
$\frac{43}{43} =$ _____

$\frac{70}{10} =$ _____

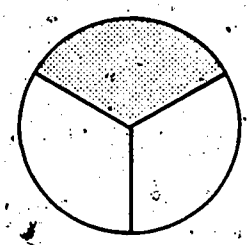
$\frac{595}{1} =$ _____

Rational Numbers and Fractions

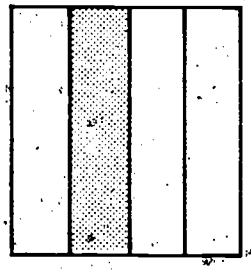
Ring the fraction that shows what part is shaded.



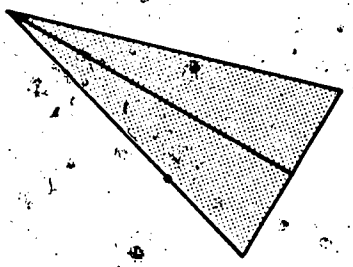
$\frac{2}{2}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$



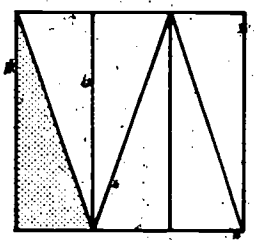
$\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{3}$ $\frac{1}{3}$



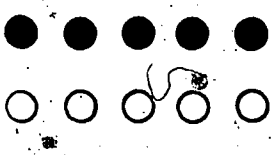
$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{6}$



$\frac{2}{2}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$



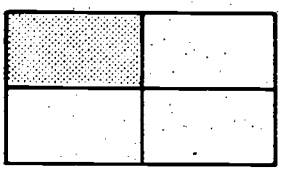
$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{6}$



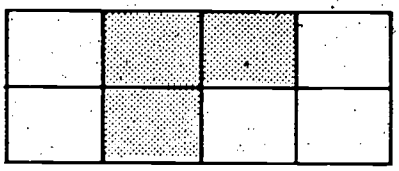
$\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{6}$

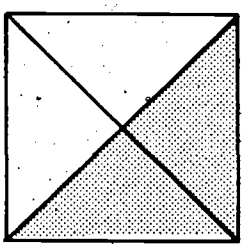
Fractions

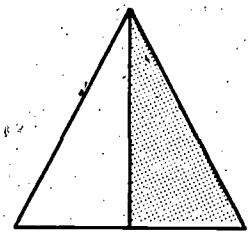
Write the fraction that shows what part is shaded.

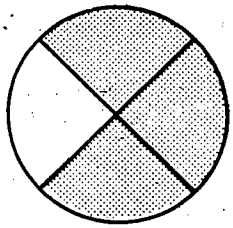


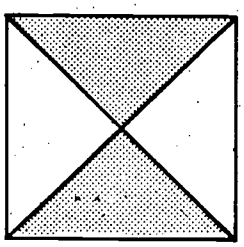
1/4

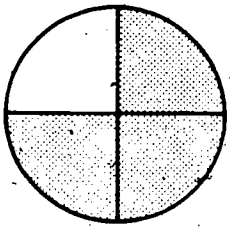


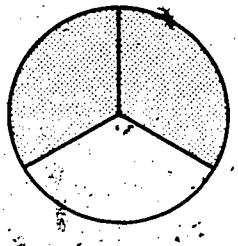


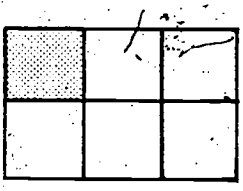


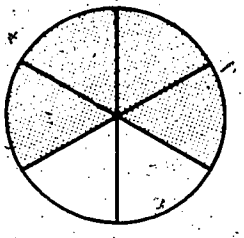






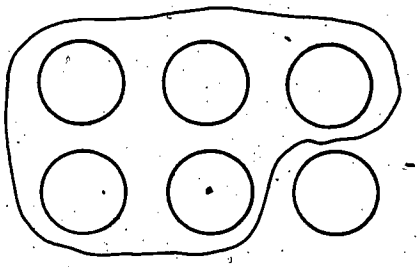




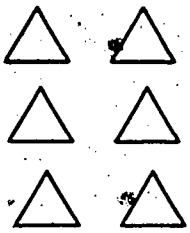


Fractions

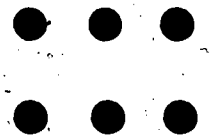
Ring the part of the set shown by the fraction.



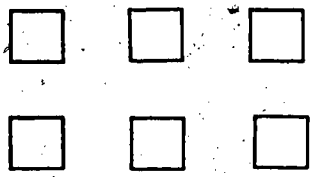
$\frac{5}{6}$



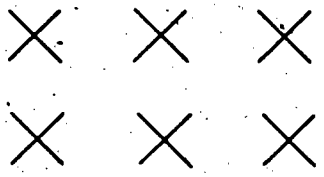
$\frac{1}{6}$



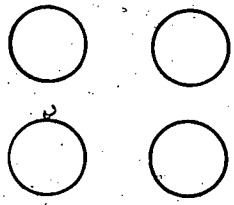
$\frac{2}{3}$



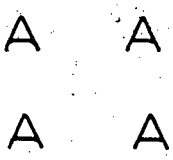
$\frac{1}{3}$



$\frac{4}{6}$

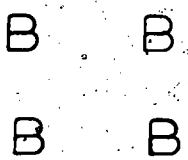


$\frac{3}{4}$

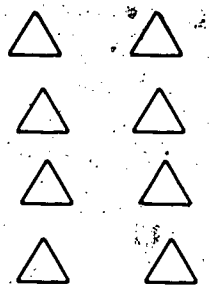


$\frac{1}{4}$

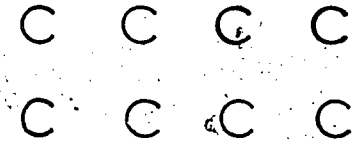
$\frac{1}{8}$



$\frac{1}{2}$



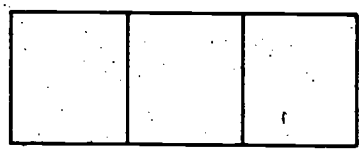
$\frac{7}{8}$



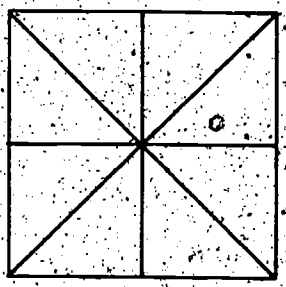
$\frac{3}{4}$

Fractions _____

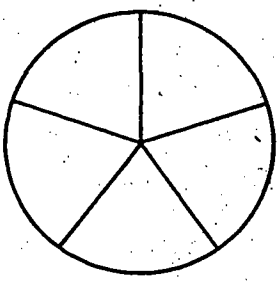
Shade the part shown by the fraction.



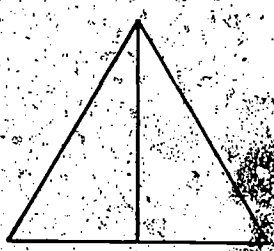
$\frac{1}{3}$



$\frac{5}{8}$



$\frac{2}{5}$



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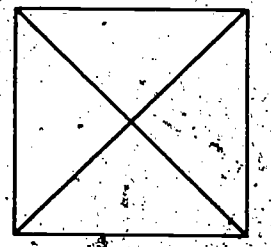
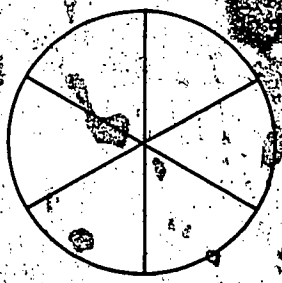
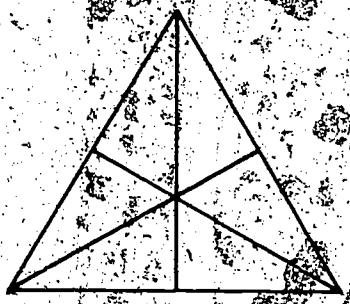


$\frac{3}{4}$



$\frac{5}{6}$

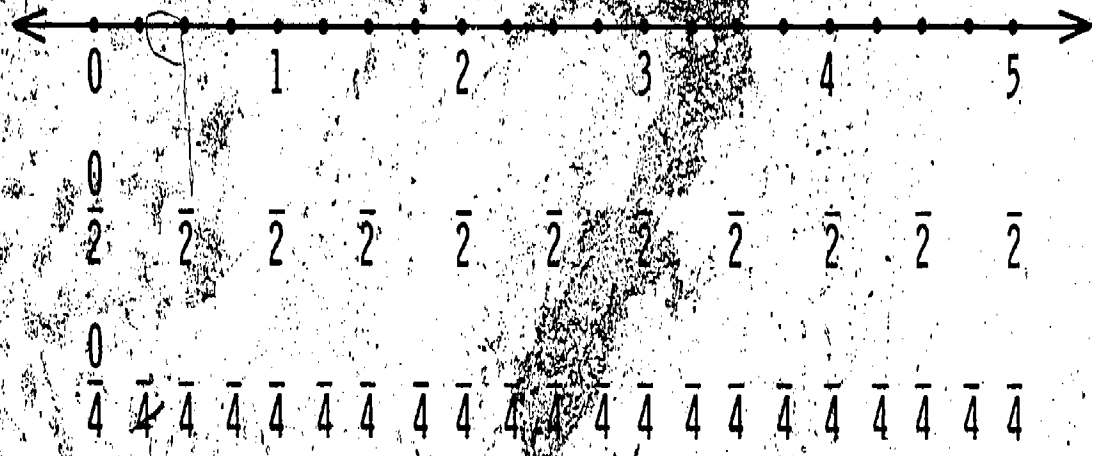


$\frac{1}{6}$

$\frac{6}{12}$

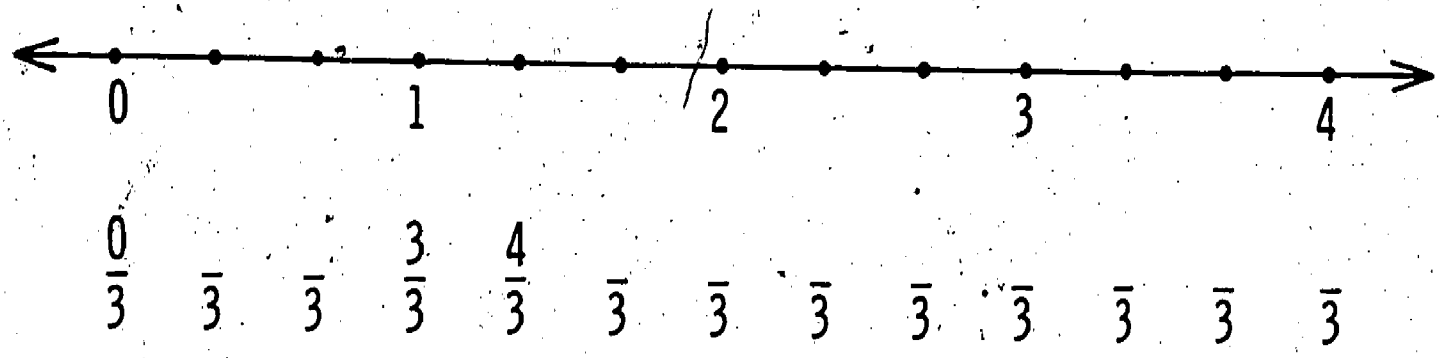
The Number Line

Name points to show halves. Show the sum of $\frac{3}{2}$ and $\frac{3}{2}$. $\frac{3}{2} + \frac{3}{2} =$

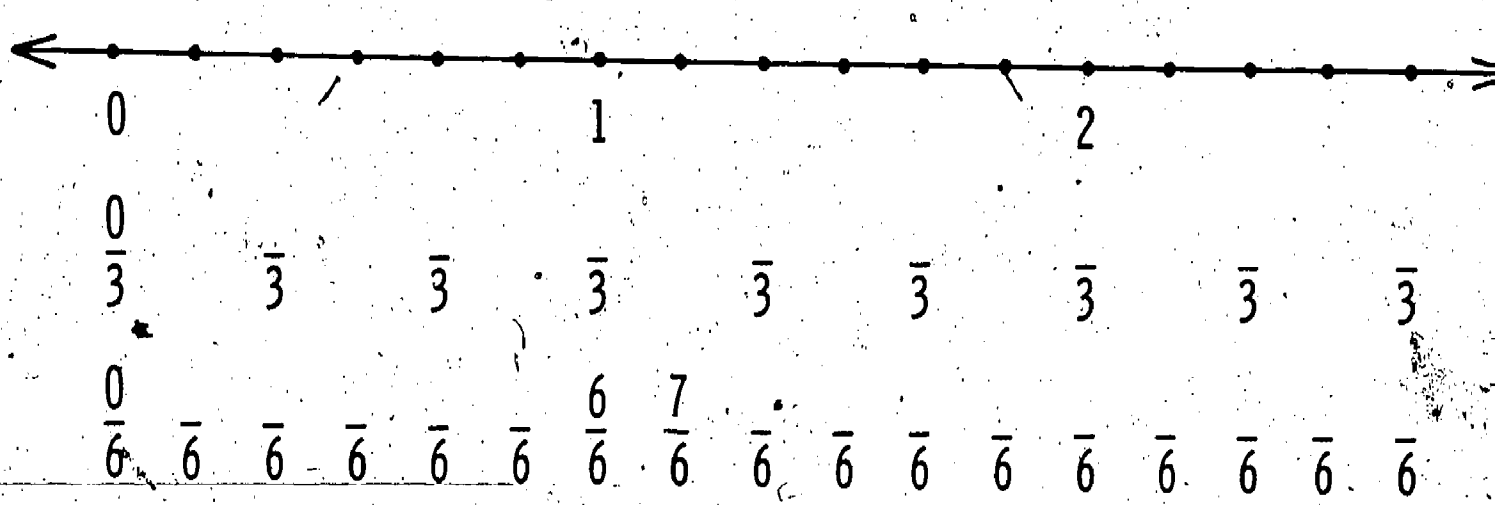


Name points to show halves and fourths. $\frac{2}{4} + \frac{3}{4} =$ _____

The Number Line



Name points to show thirds. $\frac{2}{3} + \frac{3}{3} =$ _____



Name points to show thirds and sixths. $\frac{2}{6} + \frac{3}{6} =$ _____

The following is a list of all those who participated in the preparation of this volume:

Leslie Beatty, Chula Vista City School District, Chula Vista, California
Truman Botts, University of Virginia
Leon W. Cohen, University of Maryland
Zigmund Drapalski, WTVS, Detroit Public Schools, Detroit, Michigan
Jean Dunn, Palo Alto Unified School District, Palo Alto, California
Wade Ellis, Oberlin College, Oberlin, Ohio
Mary O. Folsom, University of Miami, Florida
Mary E. Giamperoli, Edith C. Baker School, Chestnut Hill, Massachusetts
Leonard Gillman, University of Rochester, Rochester, New York
E. Glenadine Gibb, State College of Iowa
Muriel Greig, McColl School, Detroit, Michigan
Adrien L. Hess, Montana State College
Stanley B. Jackson, University of Maryland
John L. Kelley, University of California, Berkeley
Sharon Logan, Oak Ridge Elementary School, Arlington, Virginia
William F. McClintock, Stanislaus State College, Turlock, California
Mary McCulloch, University School, Northern Illinois University, DeKalb, Illinois
Patricia Michels, Joaquin Miller School, Oakland, California
Rose Mijanovich, Joaquin Miller School, Oakland, California
Mildred Pierce, Humbert School, Cedar Falls, Iowa
Frank W. Sinden, Bell Telephone Laboratories, Murray Hill, New Jersey
Jane Stenzel, Cambrian Elementary School District, San Jose, California
J. Fred Weaver, Boston University