GRADE 3

everyday Mathematics

Intervention Activities

Pre- and Post-Assessment

Use the following Grade 3 Mathematics pre-/post-assessment pages to plan instruction and monitor progress.

DIRECTIONS FOR ADMINISTERING AND SCORING ASSESSMENTS

This assessment can be administered as a Pre-Assessment for planning instruction and then again as a Post-Assessment at year's end to monitor progress. The assessment can be administered to children individually or in a group. Detailed guidelines for administering and scoring the Pre-/Post-Assessment are presented below.

GUIDELINES FOR USING THE PRE-ASSESSMENT

This Pre-/Post-Assessment is 23 pages long. Each page targets a specific Mathematics concept or skill. Plan for about 40 minutes to administer the Pre-Assessment, but allow more time if needed. Children should be allowed to finish answering every item. Depending on the children and your situation, you may want to administer the Pre-Assessment in two parts in different sittings.

Read directions aloud to the student(s). Note where students succeed and where they struggle on the Individual Pre-/Post-Assessment Scoring Chart. Then use Everyday Mathematics Intervention Activity units to support these areas.

To Administer the Pre-Assessment:

1. Make a copy of the assessment for each child.
2. Have children write their names at the top of each assessment page.
3. Read the directions on each page and make sure children know what to do.
4. Have children complete each item with their best answer.
5. When children have finished, collect the assessments.

To Score the Pre-Assessment:

1. Make a copy of the Individual Pre-/Post-Assessment Scoring Chart (found on page 27 of this PDF) for each student.
2. Mark each question correct or incorrect on the assessment page using the Answer Key (found at the end of this PDF).
3. To find the total assessment score, count the number of items answered correctly.
4. Then write the number count in the Pre-Assessment column.
5. Add the total to assess overall performance, and use the correlating unit in the EIA Mathematics book to target skills that look like they require more support.

Using the Results:

1. Use the results of the Pre-Assessment to determine each student's current level of proficiency in the strategies and concepts being assessed.
2. As explained, the items in the Pre-Assessment measure strategies in particular skills. A student's score on a particular cluster can pinpoint specific instructional needs. A student who answers fewer than 50% of items in each cluster correctly may need focused instructional attention on those particular strategies.
3. Plotting scores on the Individual Pre-Assessment/Post-Assessment Scoring Charts provides a handy reference for monitoring students' growth and development. Such information can be used to identify the skills and strategies to be reinforced for a whole group, small group, or individual.
4. Store the Pre-Assessment/Post-Assessment Scoring Charts in an appropriate location for referral during the school year, and for end-of-year comparison of the Pre-Assessment and Post-Assessment scores.

GUIDELINES FOR USING THE POST-ASSESSMENT

The Post-Assessment is identical to the Pre-Assessment and should be administered and scored in the same way. Thus, the item numbers on the Individual Pre-/Post-Assessment Scoring Chart are the same for both assessments.

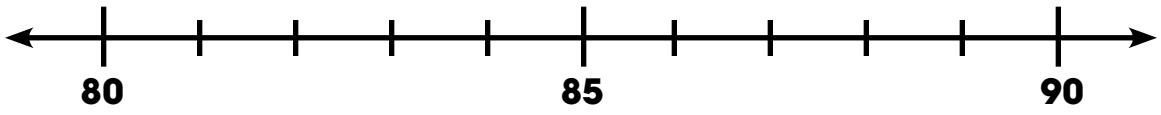
Use the results of the Post-Assessment to determine each student's current level of proficiency in the strategies being assessed. Compare the students' scores on the Pre-Assessment and Post-Assessment—and on each strategy cluster within the assessments—to evaluate the student's progress since the beginning of the year.

Grade 3 Mathematics Pre-/Post-Assessment	RecommendedEverydayMathematics Intervention Activities
Number and Operations in Base Ten	Units 1–5
Operations and Algebraic Thinking	Units 6–12
Number and Operations —Fractions	Units 13-16
Measurement and Data	Units 17–20
Geometry	Units 21–23

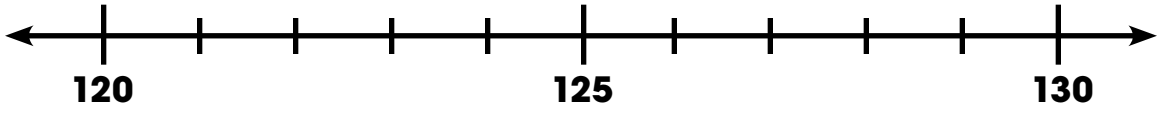
Name _____

Round each number to the nearest ten.

1. 83 _____

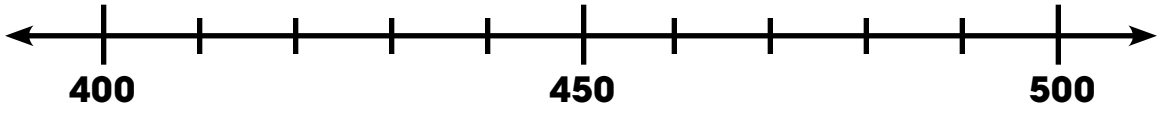


2. 125 _____



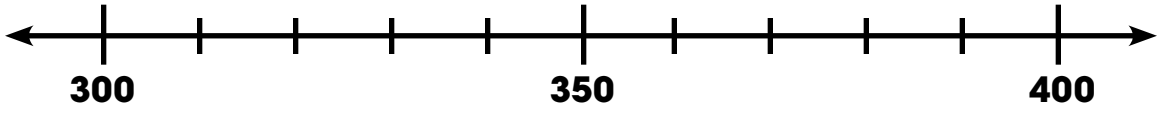
3. **Round to the nearest hundred.**

457 _____



3. **Write three numbers that round to 300 when rounded to the nearest hundred.**

_____ _____ _____



1 **Circle the problem that has a sum of about 80.**

31	27	108
+ 28	+ 52	+ 81

2 **Circle the problem that has a sum of about 700.**

256	603	305
+ 207	+ 225	+ 416

3 **Circle the problem that has a difference of about 50.**

24	71	74
– 18	– 23	– 32

4 **Circle the problem that has a difference of about 400.**

864	522	735
– 253	– 197	– 314

Solve each problem. Show your work.

1

37 + 54

$$\begin{array}{r} 37 \\ +\ 54 \\ \hline \end{array}$$

2

73 + 125

	hundreds	tens	ones
		7	3
+	1	2	5

3

53 + 76

	hundreds	tens	ones
		5	3
+		7	6

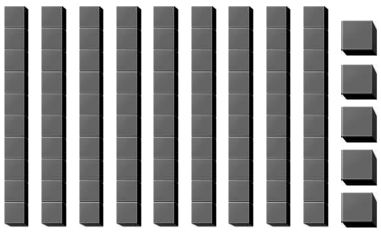
4

346 + 346

	hundreds	tens	ones
	3	4	6
+	3	4	6

Solve each problem. Show your work.

1



95 – 36 = ?

$$\begin{array}{r} 95 \\ -\ 36 \\ \hline \end{array}$$

2

137 – 88 = ?

	hundreds	tens	ones
	1	3	7
–		8	8

3

560 – 159 = ?

	hundreds	tens	ones
	5	6	0
–	1	5	9

4

642 – 185

	hundreds	tens	ones
	6	4	2
–	1	8	5

Write a number sentence to solve the problem. Then solve the problem.

1. Maya has a vase filled with flowers.

   There are 6 lilies, 8 roses, and 6 daisies.

   How many flowers are in the vase?

   _____ **+** _____ **+** _____ **= n**

   _____ flowers

2. Tess has 15 grapes.

   She ate 6 grapes at breakfast.

   Then she ate 7 more for snack.

   How many grapes does she have left?

   15 = _____ **+** _____ **+ n**

   _____ grapes

3. Sam has 12 baseball cards.

   He sells some and then buys 8 more.

   He has 17 cards now.

   How many cards did he sell?

   _____ **– n + 8 = 17**

   _____ cards

4. Ella has 36 markers.

   She has 11 markers in a box and 6 markers on her desk.

   The rest of them are in her backpack.

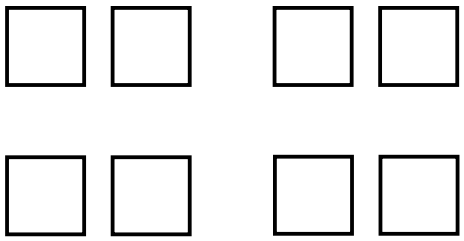
   How many markers are in her backpack?

   36 = _____ **+** _____ **+ n**

   _____ markers

Write the missing numbers.

1

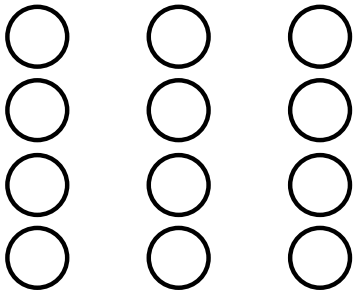


2 + 2 + 2 + 2 = _____

_____ groups of _____

4 x 2 = _____

2



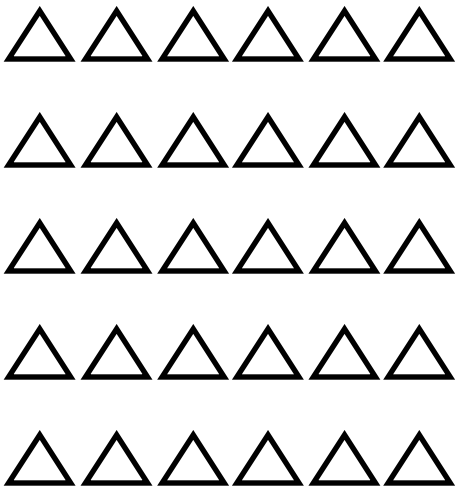
4 + 4 + 4 = _____

_____ groups of _____

3 x 4 = _____

Write an addition sentence and a multiplication sentence for each picture.

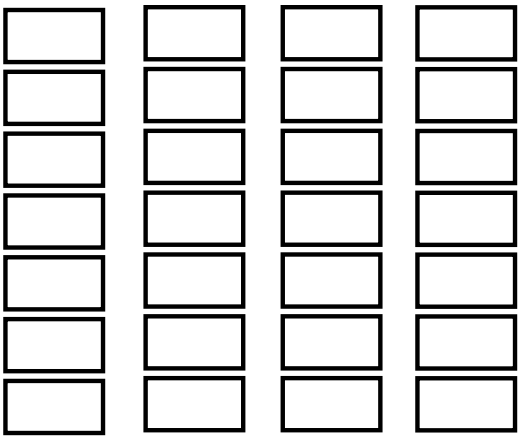
3



_____

_____

4

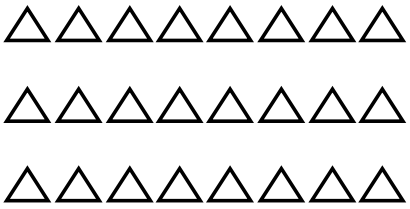


_____

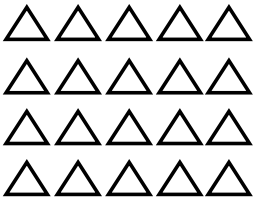
_____

Find the product.

1

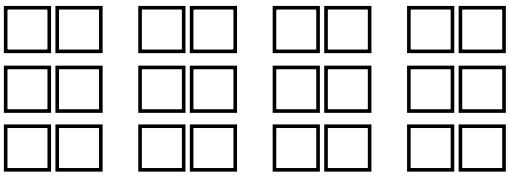


3 x 8 = _____



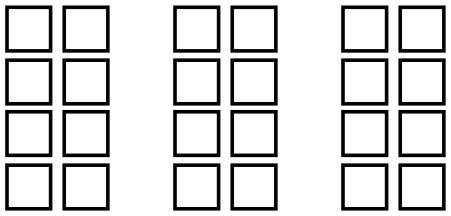
4 x 5 = _____

2



(3 x 2) x 4

6 x 4 = _____



3 x (2 x 4)

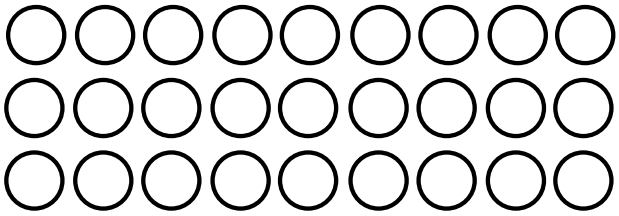
3 x 8 = _____

Draw a line to separate the counters to match the numbers.
Write the product.

3 **3 x 9**

(3 x 5) + (3 x 4)

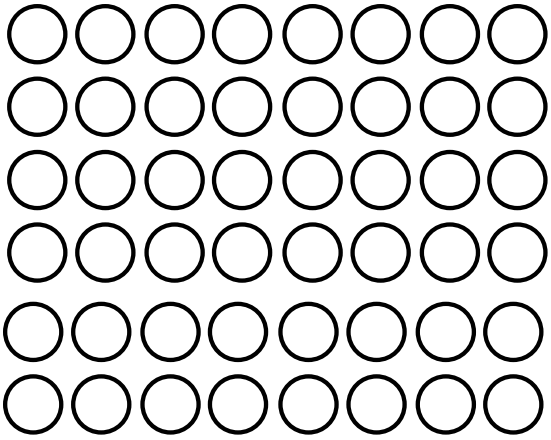
So, 3 x 9 = _____.



4 **6 x 8**

(6 x 4) + (6 x 4)

So, 6 x 8 = _____.



Find the product for each problem.

1

1 x 6 = _____

2

0 x 8 = _____

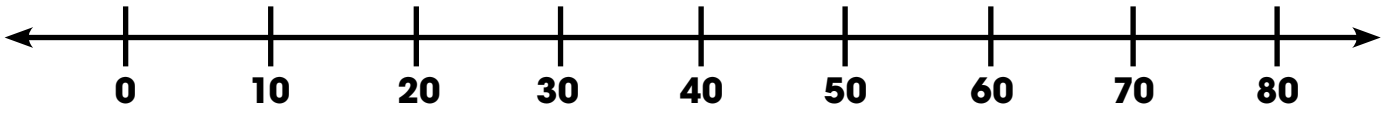
3

Write the missing numbers in the table.

Number of Bicycles	1		3	4	5
Number of Wheels	2	4	6		

4

Use the number line. Find the product.



2 x 40 = _____

Write the missing numbers.

1. 8 – 4 = _____

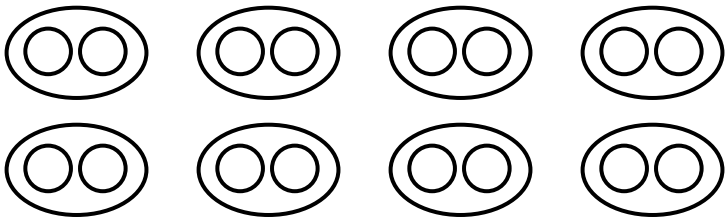
   8 – 8 = _____

   8 ÷ 4 = _____

2. 2 in each group

   _____ equal groups

   16 ÷ 2 = _____



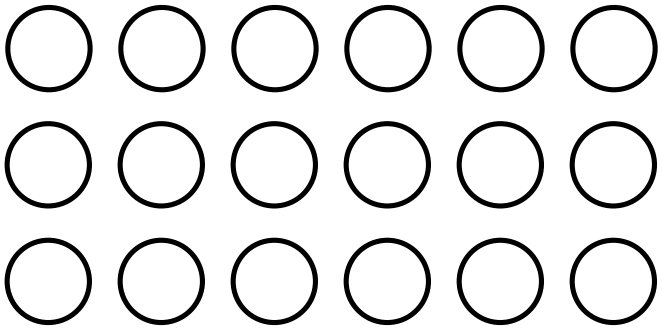
Draw rings to show equal groups. Write the missing numbers.

3.

   3 equal groups

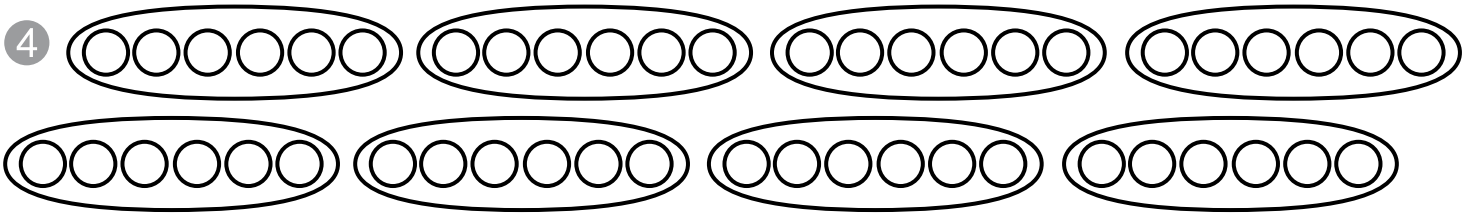
   _____ in each group

   18 ÷ 3 = _____



Write a division sentence for the picture.

4.

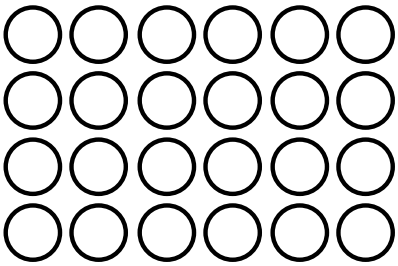


_____ ÷ _____ = _____

Name _____

Complete each fact family.

1



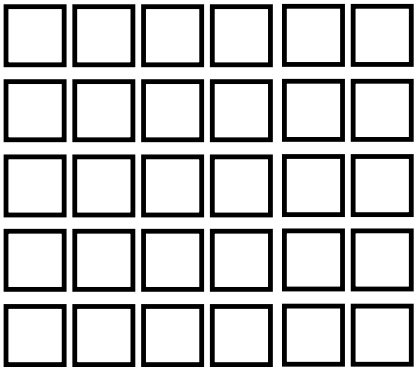
4 x 6 = 24

6 x 4 = _____

24 ÷ 4 = _____

24 ÷ 6 = _____

2



5 x 6 = _____

6 x _____ = 30

30 ÷ 5 = _____

_____ ÷ 6 = 5

Use the numbers to write each fact family.

3

3, 7, 21

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

4

5, 5, 25

_____ x _____ = _____

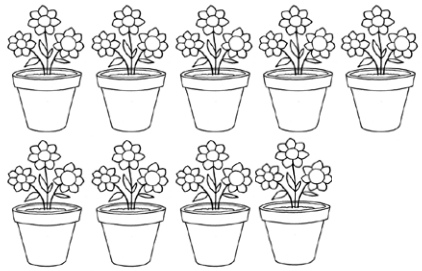
_____ ÷ _____ = _____

Name _____

Solve each problem.

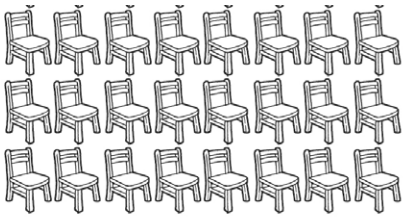
1. There are 3 flowers in each pot. There are 9 flower pots. How many flowers are there?

_____ flowers



2. There are 3 equal rows of chairs in a room. There are 24 chairs in all. How many chairs are in each row?

_____ chairs

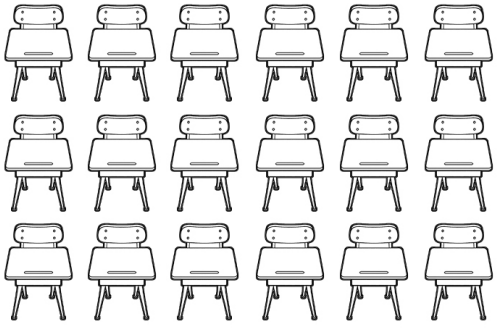


Complete the number sentence to solve each problem.

3. There are 18 desks in the classroom. There are 3 equal rows of desks. How many desks are there in each row?

18 ÷ 3 = _____

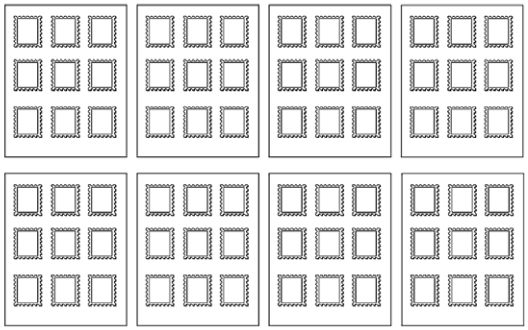
_____ desks



4. Brian has 9 stamps on each page of his stamp book. There are 8 pages in his book. How many stamps are in the book?

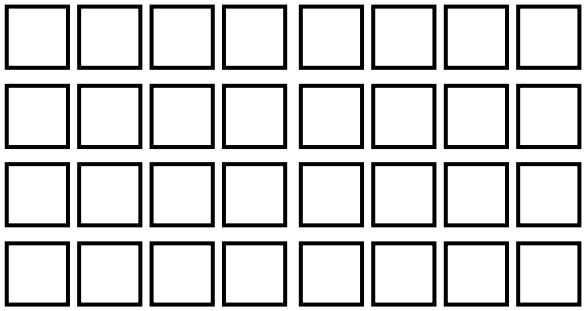
8 x 9 = _____

_____ stamps

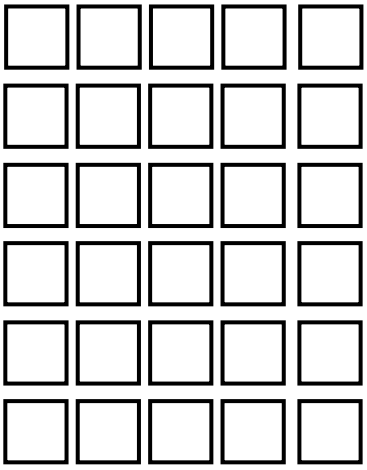


Name _____

Complete each number sentence.

1 

4 x _____ = 32

2 

_____ = 30 ÷ 5

Circle the multiplication sentence that will help you find the quotient. Then write the quotient.

3 **12 ÷ 6 = _____**

2 x 3 = 6

2 x 6 = 12

3 x 4 = 12

4 **36 ÷ 6 = _____**

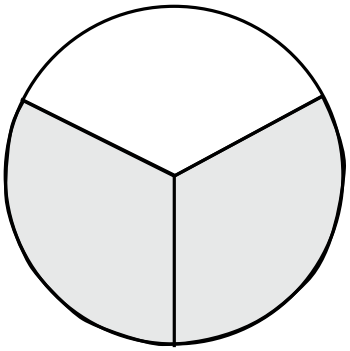
4 x 6 = 24

4 x 9 = 36

6 x 6 = 36

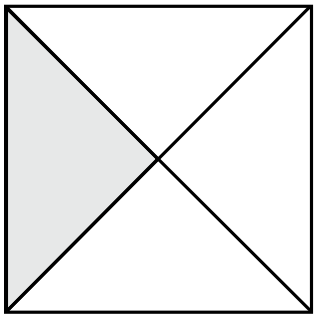
Write the fraction to name the shaded part.

1



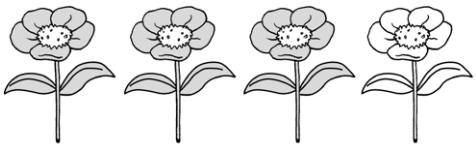
$\frac{2}{\square}$

2



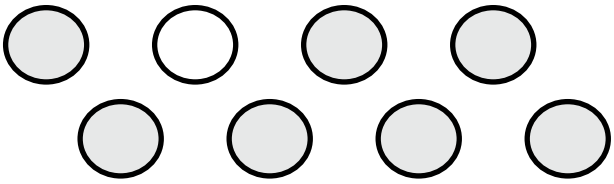
$\frac{\square}{4}$

3



$\frac{\square}{\square}$

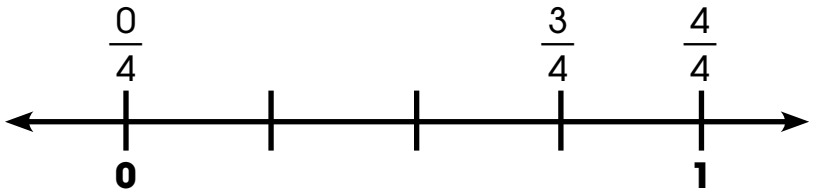
4



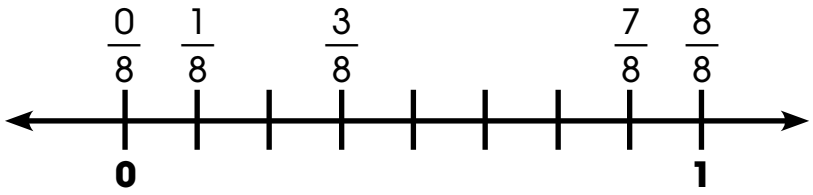
$\frac{\square}{\square}$

Draw a point on each number line to show the fraction.

1. $\frac{1}{4}$

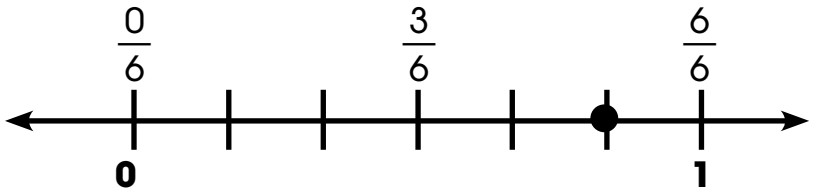


2. $\frac{4}{8}$

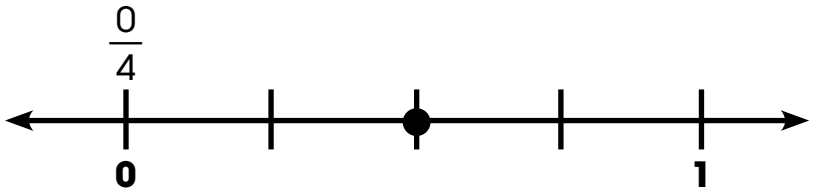


Write a fraction that names each point.

3.



4.



Use the fraction bars and number lines to write equivalent fractions.

1

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

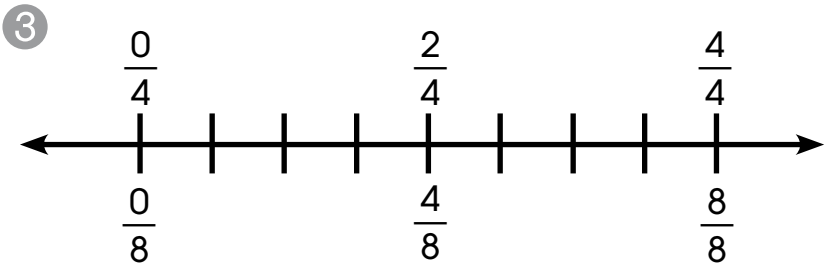
$$\frac{2}{3} = \frac{\square}{\square}$$

2

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

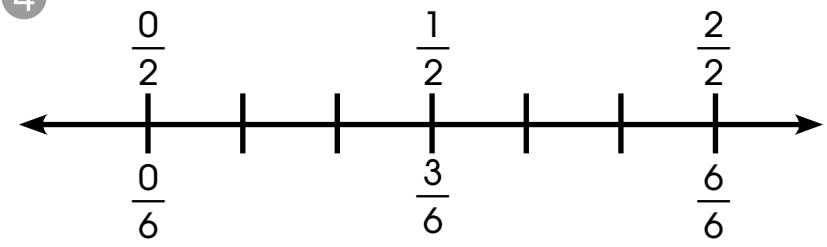
$$\frac{2}{4} = \frac{\square}{\square}$$

3



$$\frac{2}{4} = \frac{\square}{\square}$$

4



$$\frac{1}{2} = \frac{\square}{\square}$$

Compare the fractions. Write <, >, or =.

1. $\frac{1}{8}$ ◯ $\frac{1}{2}$

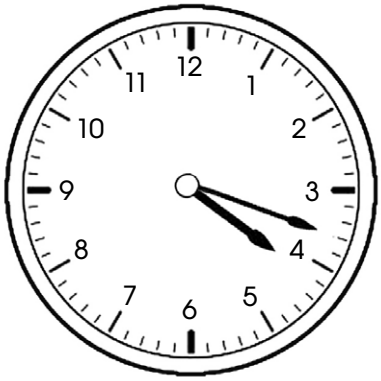
2. $\frac{2}{8}$ ◯ $\frac{5}{8}$

3. $\frac{3}{4}$ ◯ $\frac{3}{6}$

4. $\frac{4}{4}$ ◯ $\frac{3}{3}$

Write the time two ways. Write the missing numbers.

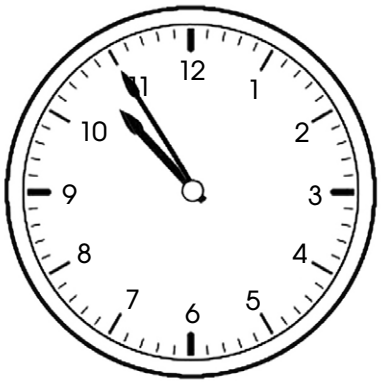
1



_____:_____

_____ minutes after _____

2

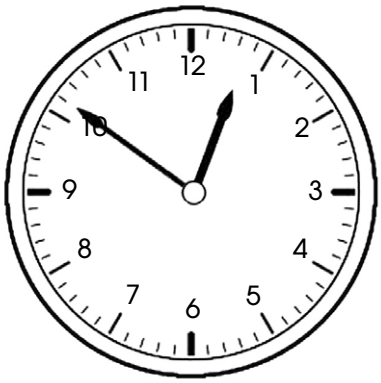


_____:_____

_____ minutes before _____

Write how many minutes have passed.

3

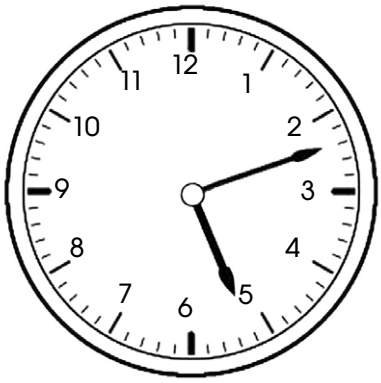


Start at 12:51 P.M.

End at 1:01 A.M.

_____ minutes have passed.

4



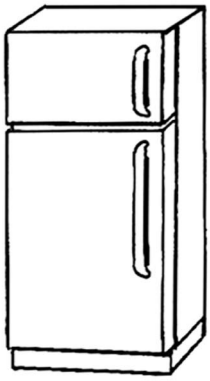
Start at 5:12 P.M.

End at 5:30 P.M.

_____ minutes have passed.

Circle the better estimate of the mass of each object.

1

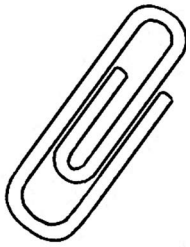


refrigerator

200 grams

200 kilograms

2



paper clip

1 gram

1 kilogram

Circle the better estimate of the volume of each object.

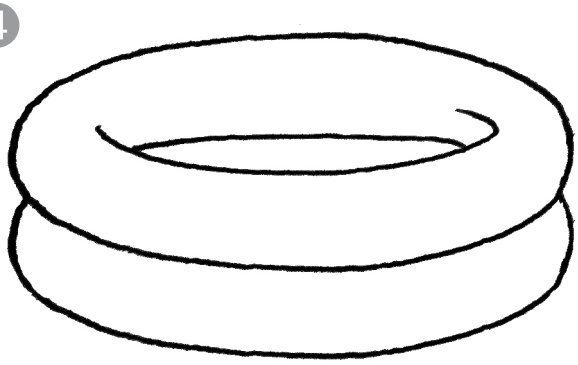
3

pitcher

1 liter

10 liters

4



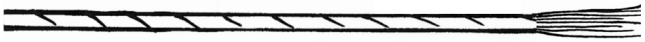
swimming pool

10 liters

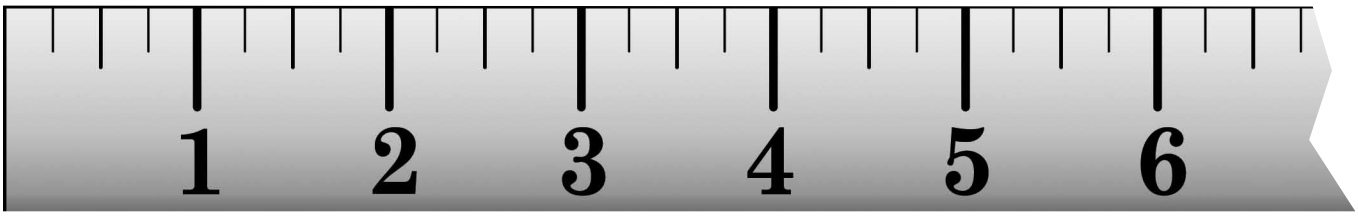
100 liters

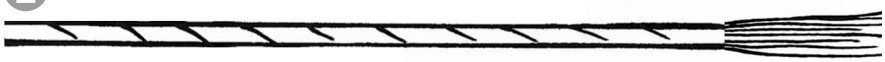
Name _____

Measure each item to the nearest quarter inch.

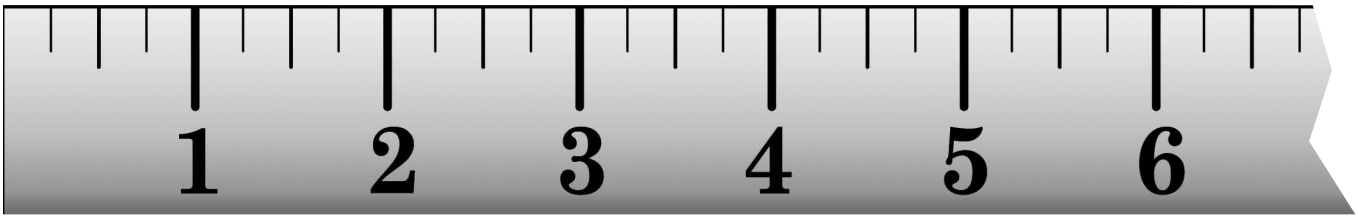
1. 

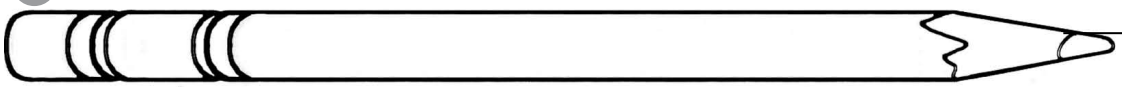
_____ inches



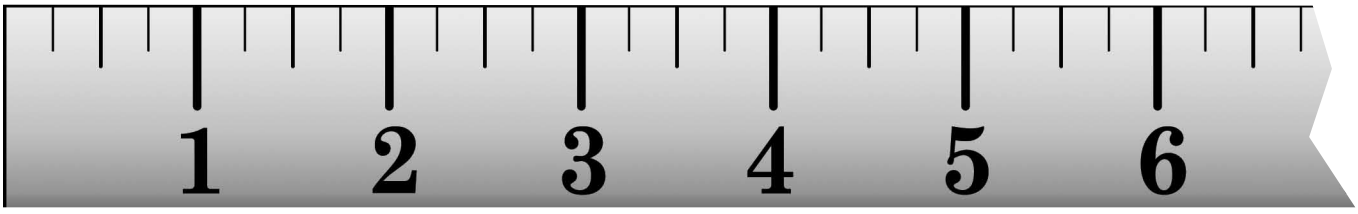
2. 

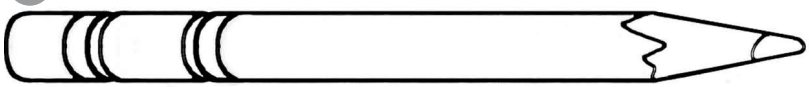
_____ inches



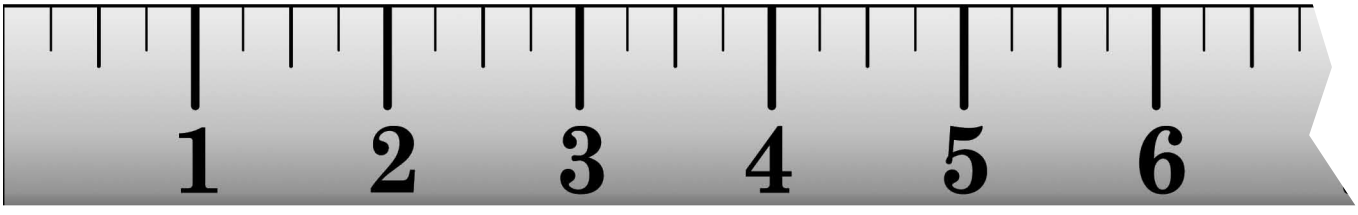
3. 

_____ inches



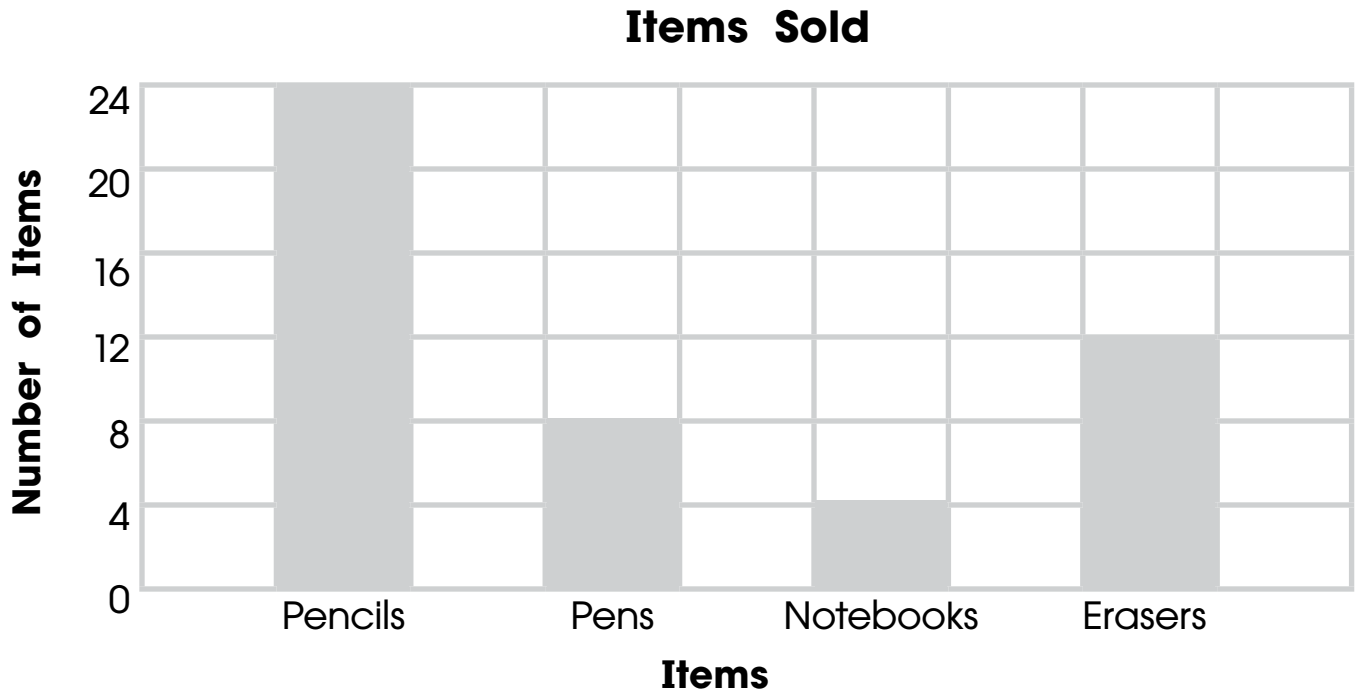
4. 

_____ inches



Name _____

The bar graph shows the number of items sold at the school store.



Use the bar graph to answer each question.

1. How many more pencils were sold than pens?

_____ more pencils

2. How many more erasers were sold than notebooks?

_____ more erasers

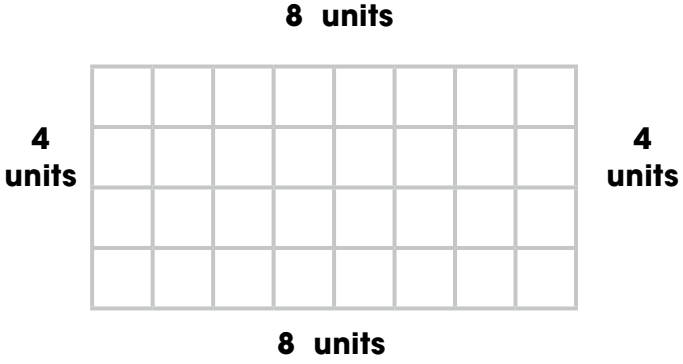
3. How many fewer pens were sold than erasers?

_____ fewer pens

4. What if 2 more notebooks were also sold? Adjust the bar on the graph to show the added sales.

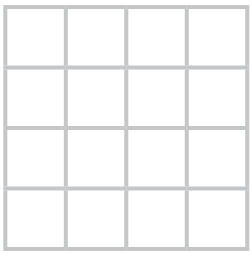
Find the perimeter of each figure.

1



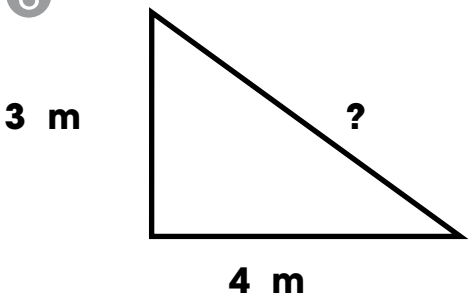
Perimeter: _____ units

2



Perimeter: _____ units

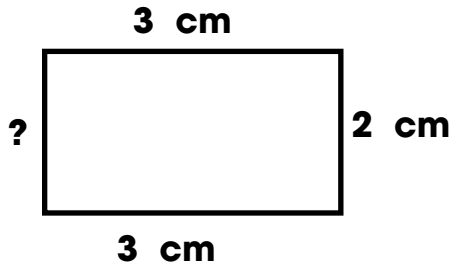
3



Perimeter: 12 meters

Missing side: _____ meters

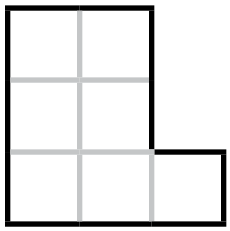
4



Missing side: _____ centimeters

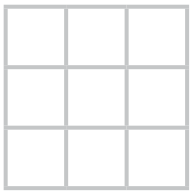
Perimeter: _____ centimeters

Find the area of each figure.

1. 

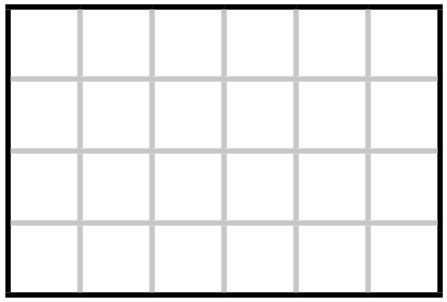
3 + 3 + 1 = ☐

_____ square units

2. 

3 x 3 = ☐

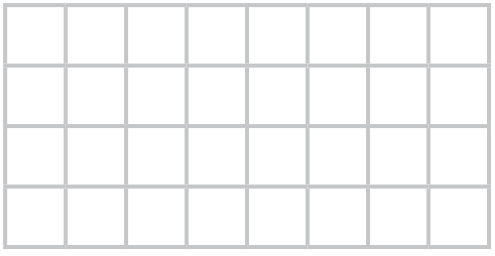
_____ square units

3. 

_____ x _____ = ☐

_____ square units

4. **Draw a figure to match the area.**



Area = 8 square units

Draw each figure.

1. quadrilateral with 4 sides of equal lengths

2. quadrilateral that is NOT a rectangle

3. quadrilateral that does NOT have 4 right angles

Individual Scoring Chart

Name _____

Student Name_____ **Pre-Assessment Date:** _____

Post-Assessment Date: _____

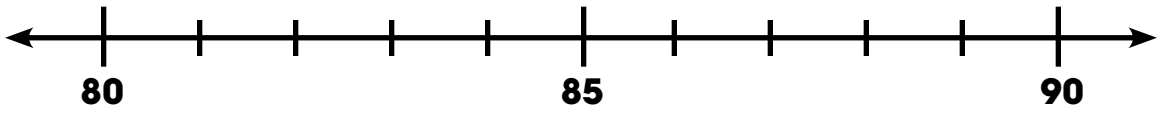
Skill	Assessment page	Pre-Assessment	Post-Assessment	EIA Mathematics Unit
Use Place Value to Round Whole Numbers	4	/4	/4	Unit 1
Estimate Sums and Differences	5	/4	/4	Unit 2
Add Whole Numbers	6	/4	/4	Unit 3
Subtract Whole Numbers	7	/4	/4	Unit 4
Solve Two-Step Problems	8	/4	/4	Unit 5
Meaning of Multiplication	9	/4	/4	Unit 6
Properties of Multiplication	10	/4	/4	Unit 7
Patterns in Multiplication	11	/4	/4	Unit 8
Meaning of Division	12	/4	/4	Unit 9
Fact Families for Multiplication and Division	13	/4	/4	Unit 10
Solve Multiplication and Division Problems	14	/4	/4	Unit 11
Use Multiplication or Division to Find Numbers	15	/4	/4	Unit 12
Understand Fractions	16	/4	/4	Unit 13
Fractions on a Number Line	17	/4	/4	Unit 14
Equivalent Fractions	18	/4	/4	Unit 15
Compare Fractions	19	/4	/4	Unit 16
Time to the Minute	20	/4	/4	Unit 17
Grams, Kilograms, Liters	21	/4	/4	Unit 18
Measure Length to the Nearest Quarter Inch	22	/4	/4	Unit 19
Make and Use Pictographs and Bar Graphs	23	/4	/4	Unit 20
Understand Perimeter	24	/4	/4	Unit 21
Understand Area	25	/4	/4	Unit 22
Quadrilaterals	26	/3	/3	Unit 23
TOTAL		/91	/91	

Name _____

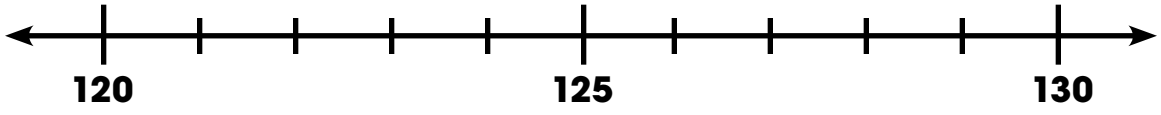
ANSWER KEY

Round each number to the nearest ten.

1. 83 80

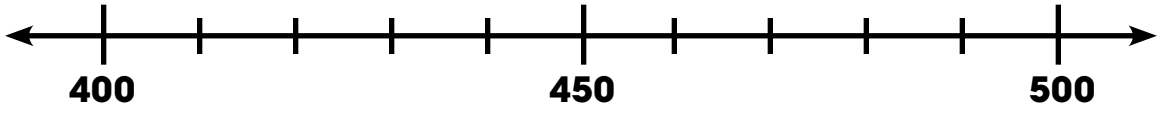


2. 125 130



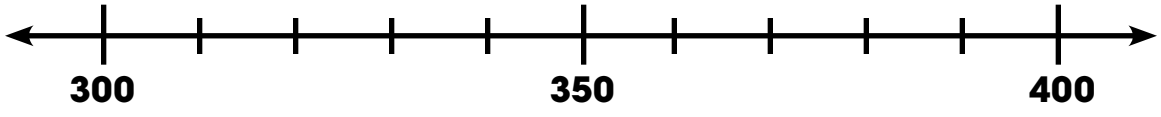
3. **Round to the nearest hundred.**

457 500



3. **Write three numbers that round to 300 when rounded to the nearest hundred.**

answers may vary from 301-349 _____ _____ _____



1 **Circle the problem that has a sum of about 80.**

31 + 28	27 + 52	108 + 81

2 **Circle the problem that has a sum of about 700.**

256 + 207	603 + 225	305 + 416

3 **Circle the problem that has a difference of about 50.**

24 – 18	71 – 23	74 – 32

4 **Circle the problem that has a difference of about 400.**

864 – 253	522 – 197	735 – 314

Solve each problem. Show your work.

1

37 + 54

$$\begin{array}{r} 37 \\ +\ 54 \\ \hline 91 \end{array}$$

2

73 + 125

	hundreds	tens	ones
		7	3
+	1	2	5

198

3

53 + 76

	hundreds	tens	ones
		5	3
+		7	6

129

4

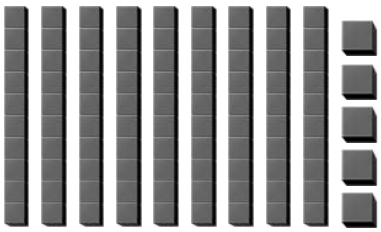
346 + 346

	hundreds	tens	ones
	3	4	6
+	3	4	6

821

Solve each problem. Show your work.

1



95 – 36 = ?

$$\begin{array}{r} 95 \\ -\ 36 \\ \hline 59 \end{array}$$

2

137 – 88 = ?

	hundreds	tens	ones
	1	3	7
–		8	8

49

3

560 – 159 = ?

	hundreds	tens	ones
	5	6	0
–	1	5	9

401

4

642 – 185

	hundreds	tens	ones
	6	4	2
–	1	8	5

457

Write a number sentence to solve the problem. Then solve the problem.

1. Maya has a vase filled with flowers.

   There are 6 lilies, 8 roses, and 6 daisies.

   How many flowers are in the vase?

   6 + 8 + 6 = n

   20 flowers

2. Tess has 15 grapes.

   She ate 6 grapes at breakfast.

   Then she ate 7 more for snack.

   How many grapes does she have left?

   15 = 6 + 7 + n

   2 grapes

3. Sam has 12 baseball cards.

   He sells some and then buys 8 more.

   He has 17 cards now.

   How many cards did he sell?

   12 - n + 8 = 17

   3 cards

4. Ella has 36 markers.

   She has 11 markers in a box and 6 markers on her desk.

   The rest of them are in her backpack.

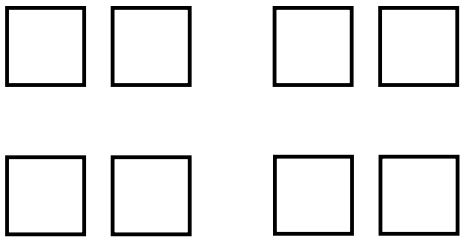
   How many markers are in her backpack?

   36 = 11 + 6 + n

   19 markers

Write the missing numbers.

1

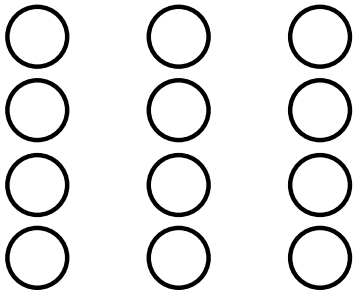


2 + 2 + 2 + 2 = 8

4 groups of **2**

4 x 2 = 8

2



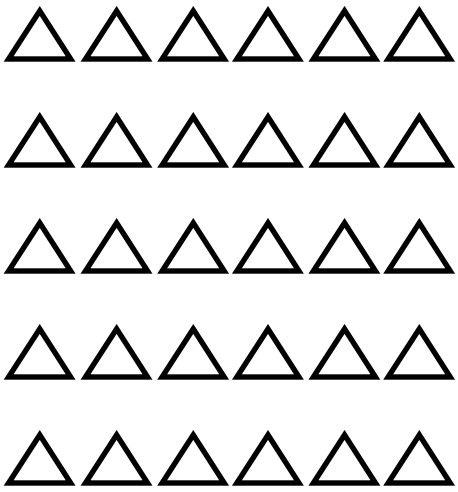
4 + 4 + 4 = 12

3 groups of **4**

3 x 4 = 12

Write an addition sentence and a multiplication sentence for each picture.

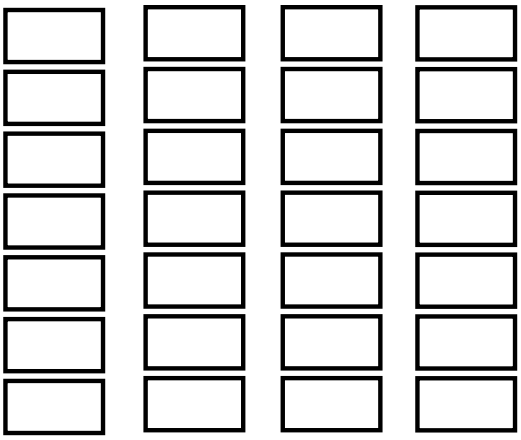
3



6 + 6 + 6 + 6 + 6 = 30

5 x 6 = 30

4

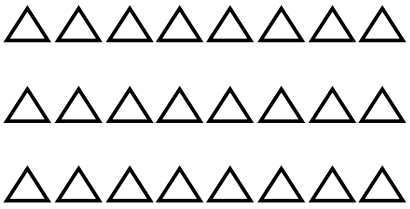


7 + 7 + 7 + 7 = 28

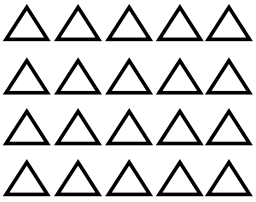
4 x 7 = 28

Find the product.

1

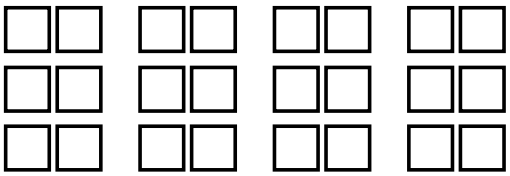


3 x 8 = 24



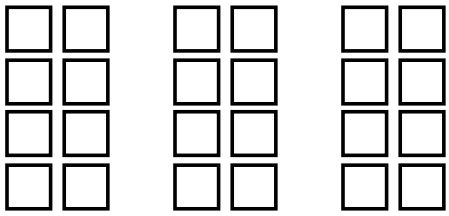
4 x 5 = 20

2



(3 x 2) x 4

6 x 4 = 24

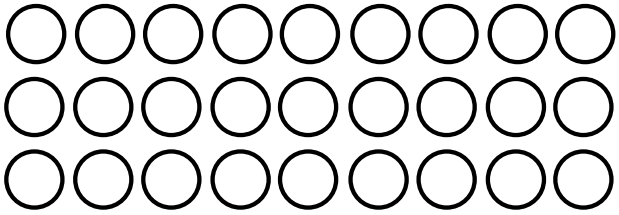


3 x (2 x 4)

3 x 8 = 24

Draw a line to separate the counters to match the numbers.
Write the product.

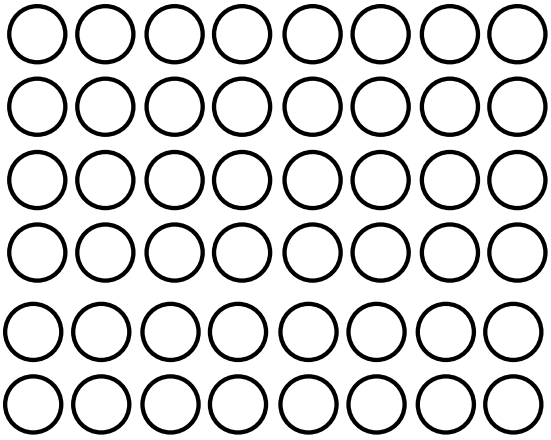
3 **3 x 9**



(3 x 5) + (3 x 4)

So, 3 x 9 = 27 **.**

4 **6 x 8**



(6 x 4) + (6 x 4)

So, 6 x 8 = 48 **.**

Find the product for each problem.

1

1 x 6 = 6

2

0 x 8 = 0

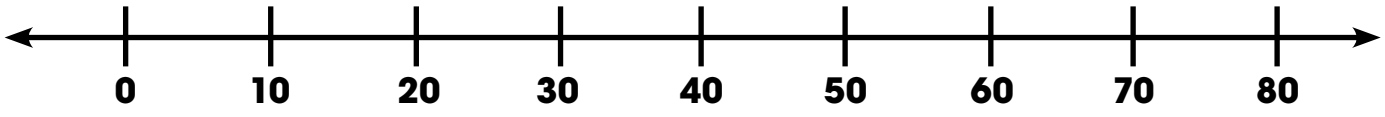
3

Write the missing numbers in the table.

Number of Bicycles	1	2	3	4	5
Number of Wheels	2	4	6	8	10

4

Use the number line. Find the product.



2 x 40 = 80

Write the missing numbers.

1. 8 − 4 = 4

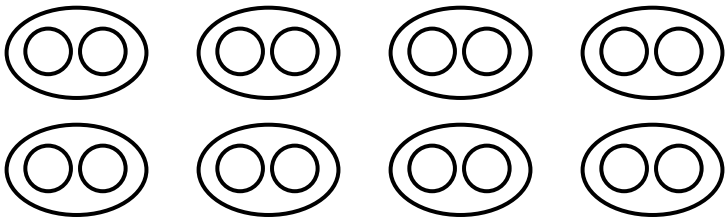
   8 − 8 = 0

   8 ÷ 4 = 2

2. 2 in each group

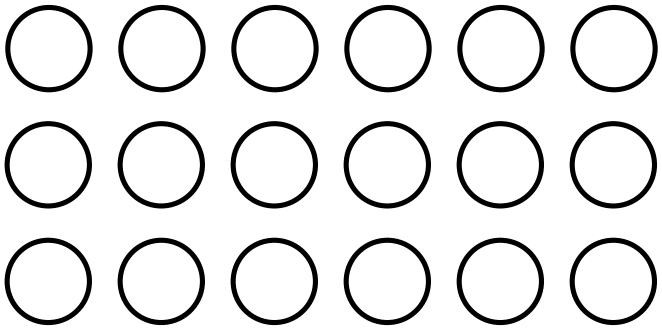
   8 equal groups

   16 ÷ 2 = 8



Draw rings to show equal groups. Write the missing numbers.

3.



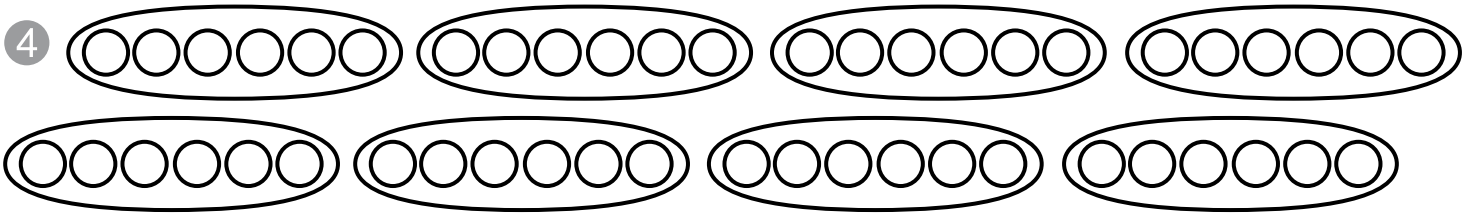
3 equal groups

6 in each group

18 ÷ 3 = 6

Write a division sentence for the picture.

4.

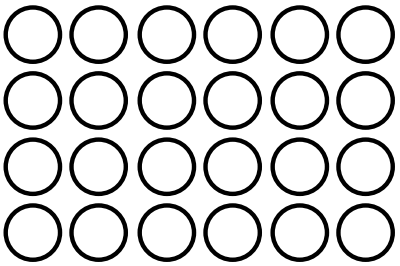


48 ÷ 8 = 6

Name _____

Complete each fact family.

1



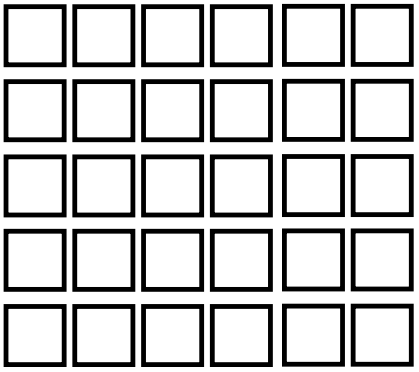
4 x 6 = 24

6 x 4 = 24

24 ÷ 4 = 6

24 ÷ 6 = 4

2



5 x 6 = 30

6 x 5 = 30

30 ÷ 5 = 6

30 ÷ 6 = 5

Use the numbers to write each fact family.

3

3, 7, 21

3 x 7 = 21

7 x 3 = 21

21 ÷ 3 = 7

21 ÷ 7 = 3

4

5, 5, 25

5 x 5 = 25

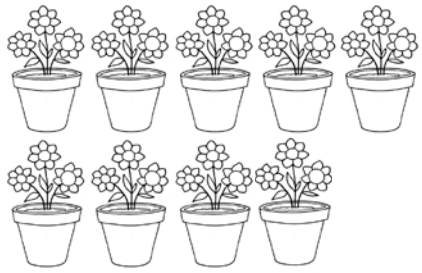
25 ÷ 5 = 5

Name _____

Solve each problem.

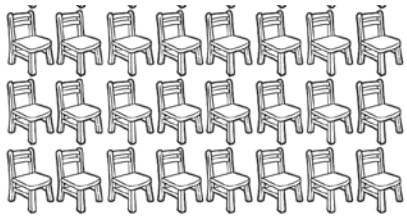
1. There are 3 flowers in each pot. There are 9 flower pots. How many flowers are there?

27 flowers



2. There are 3 equal rows of chairs in a room. There are 24 chairs in all. How many chairs are in each row?

8 chairs

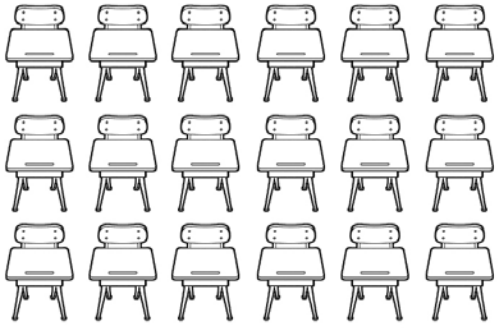


Complete the number sentence to solve each problem.

3. There are 18 desks in the classroom. There are 3 equal rows of desks. How many desks are there in each row?

18 ÷ 3 = 6

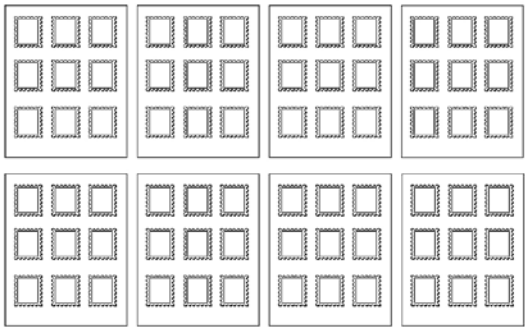
6 desks



4. Brian has 9 stamps on each page of his stamp book. There are 8 pages in his book. How many stamps are in the book?

8 x 9 = 72

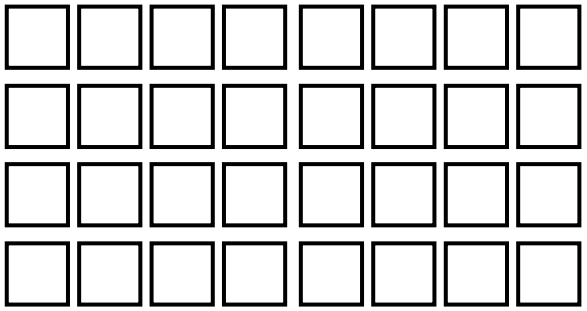
72 stamps



Name _____

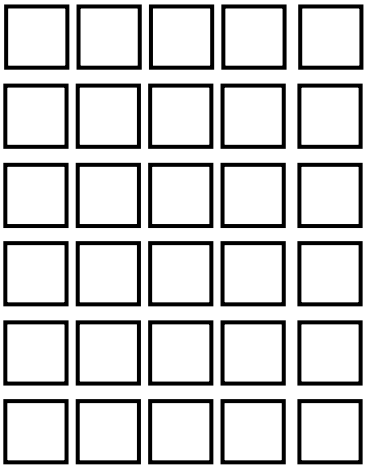
Complete each number sentence.

1



4 x 8 **= 32**

2



6 **= 30 ÷ 5**

Circle the multiplication sentence that will help you find the quotient. Then write the quotient.

3 **12 ÷ 6 =** _____

2 x 3 = 6

2 x 6 = 12

3 x 4 = 12

4 **36 ÷ 6 =** _____

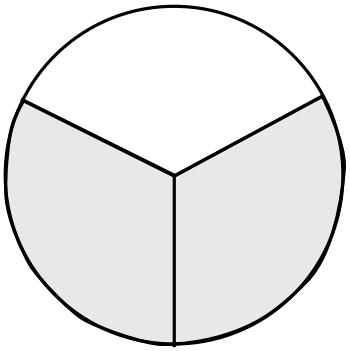
4 x 6 = 24

4 x 9 = 36

6 x 6 = 36

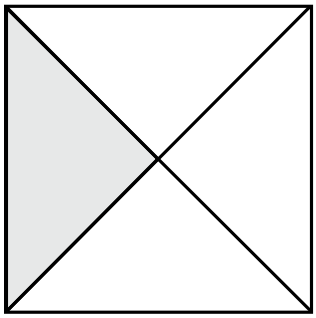
Write the fraction to name the shaded part.

1



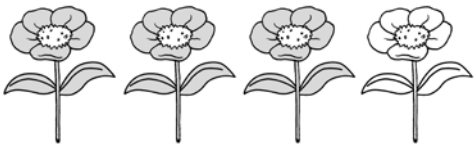
$\frac{2}{3}$

2



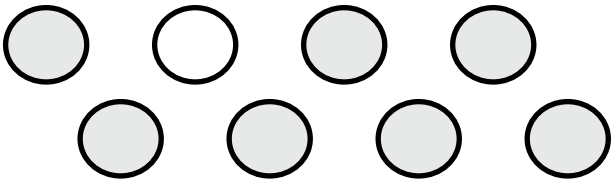
$\frac{1}{4}$

3



$\frac{3}{4}$

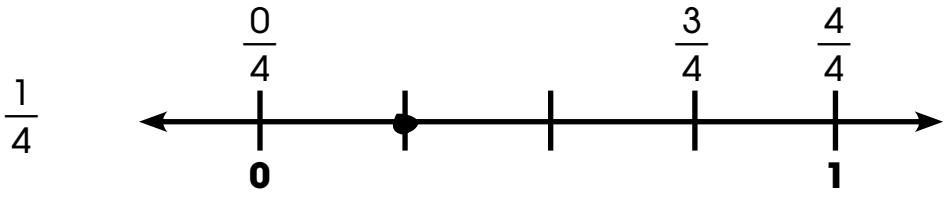
4



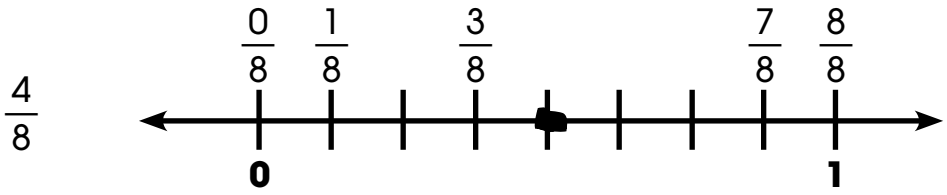
$\frac{7}{8}$

Draw a point on each number line to show the fraction.

1. $\frac{1}{4}$

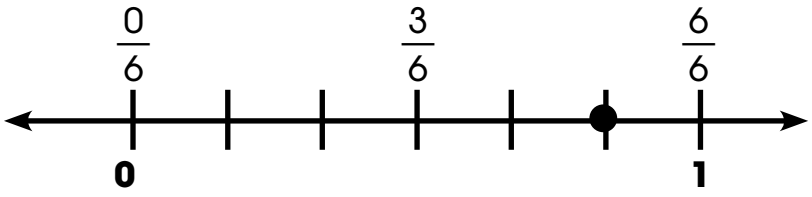


2. $\frac{4}{8}$



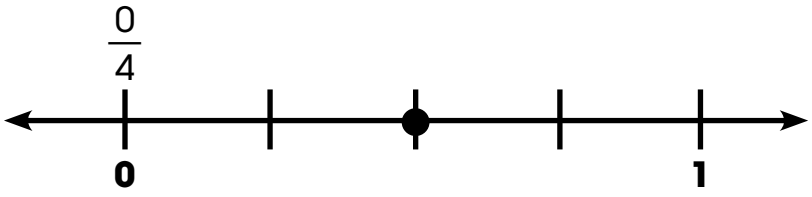
Write a fraction that names each point.

3.



$\frac{5}{6}$

4.



$\frac{2}{4}$

Use the fraction bars and number lines to write equivalent fractions.

1

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

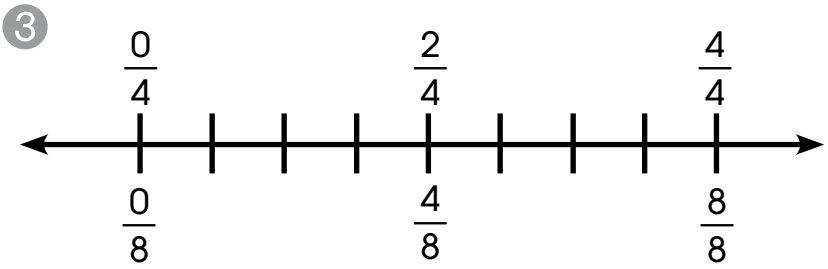
$$\frac{2}{3} = \frac{\boxed{4}}{\boxed{6}}$$

2

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

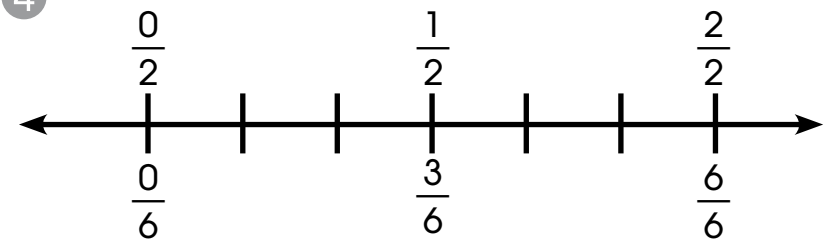
$$\frac{2}{4} = \frac{\boxed{1}}{\boxed{2}}$$

3



$$\frac{2}{4} = \frac{\boxed{4}}{\boxed{8}}$$

4



$$\frac{1}{2} = \frac{\boxed{3}}{\boxed{6}}$$

Compare the fractions. Write <, >, or =.

1. $\frac{1}{8} < \frac{1}{2}$

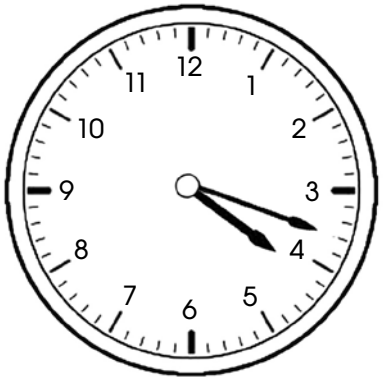
2. $\frac{2}{8} < \frac{5}{8}$

3. $\frac{3}{4} > \frac{3}{6}$

4. $\frac{4}{4} = \frac{3}{3}$

Write the time two ways. Write the missing numbers.

1



4 : 18

18 minutes after 4

2

10 : 55

5 minutes before 11

Write how many minutes have passed.

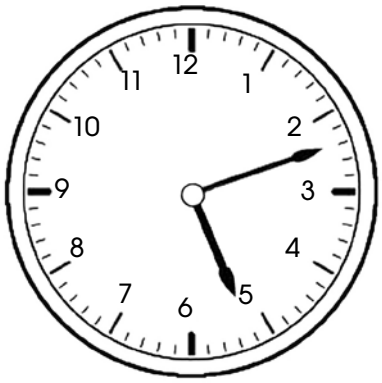
3

Start at 12:51 P.M.

End at 1:01 A.M.

10 minutes have passed.

4



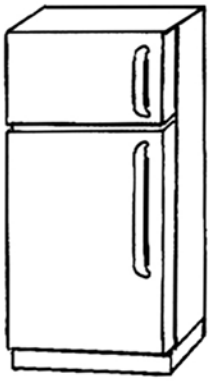
Start at 5:12 P.M.

End at 5:30 P.M.

18 minutes have passed.

Circle the better estimate of the mass of each object.

1

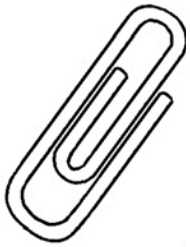


refrigerator

200 grams

(200 kilograms)

2



paper clip

(1 gram)

1 kilogram

Circle the better estimate of the volume of each object.

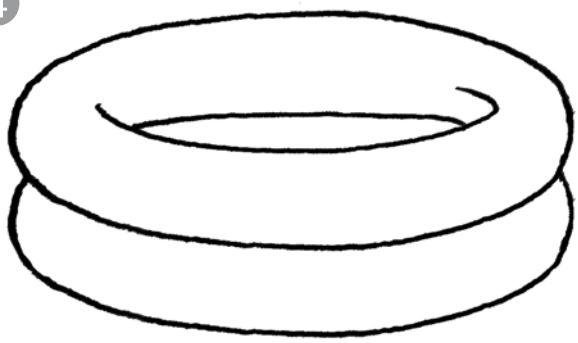
3

pitcher

(1 liter)

10 liters

4



swimming pool

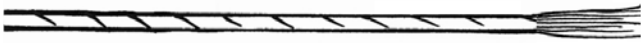
10 liters

(100 liters)

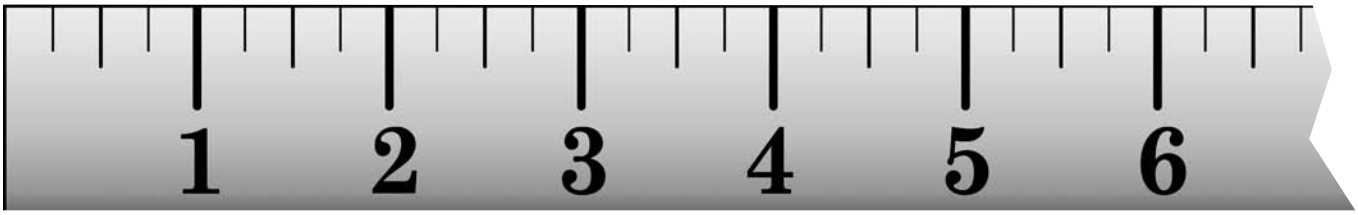
Name _____

Measure each item to the nearest quarter inch.

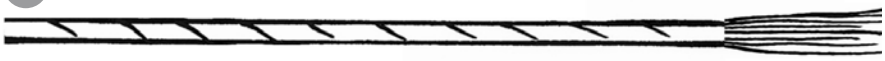
1



3 1/4 inches

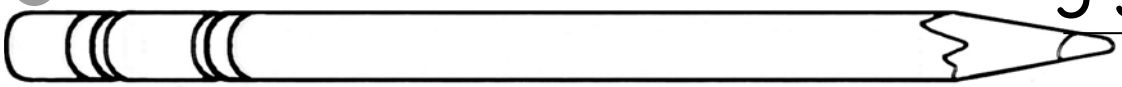


2

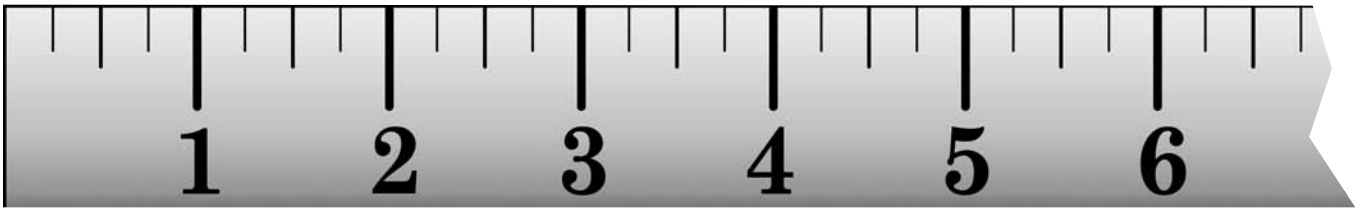


4 1/2 inches

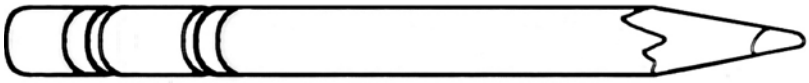
3



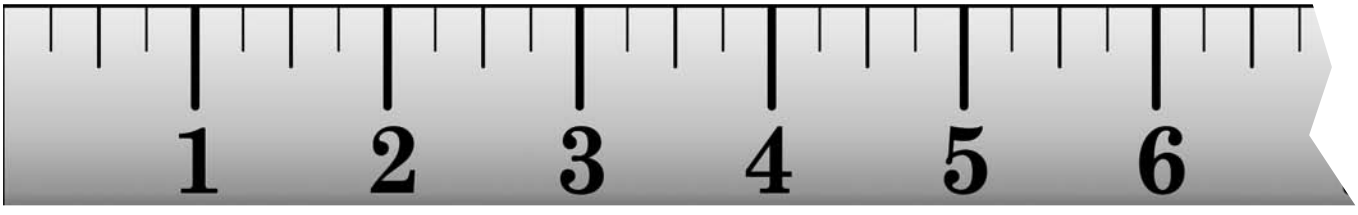
5 3/4 inches



4

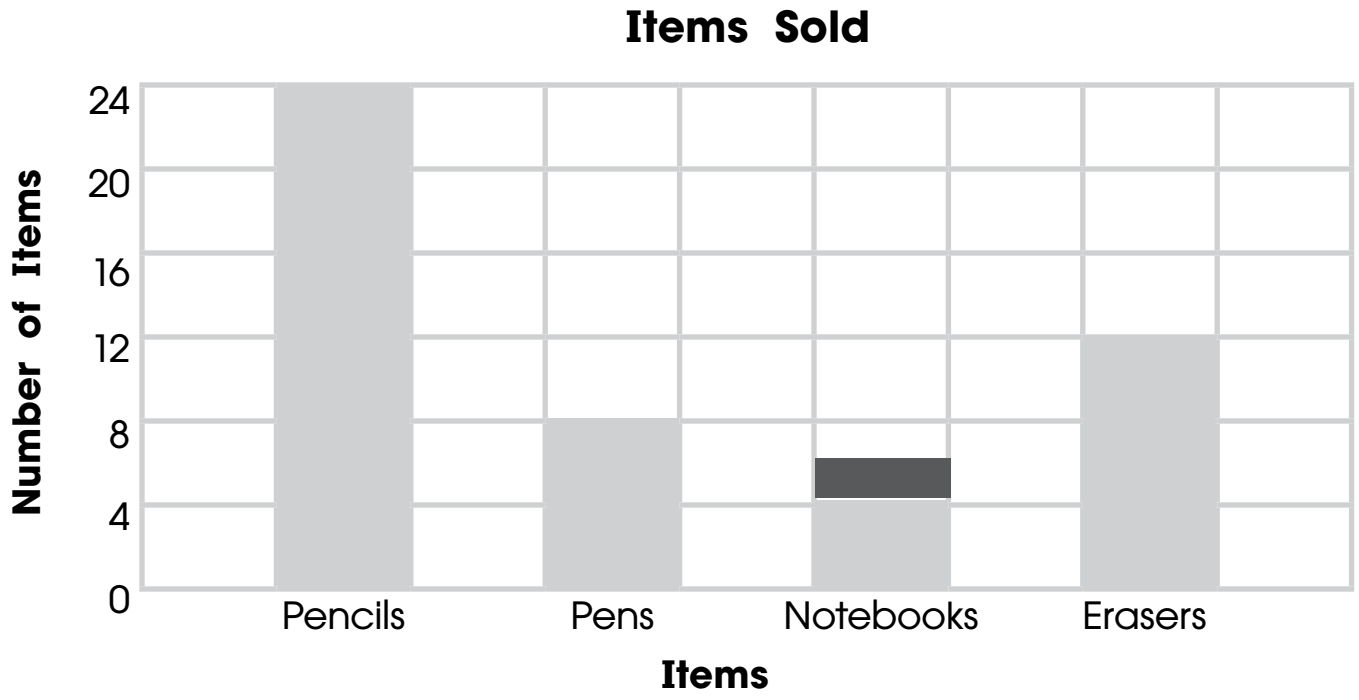


4 1/4 inches



Name _____

The bar graph shows the number of items sold at the school store.



Use the bar graph to answer each question.

1. How many more pencils were sold than pens?

16 more pencils

2. How many more erasers were sold than notebooks?

8 more erasers

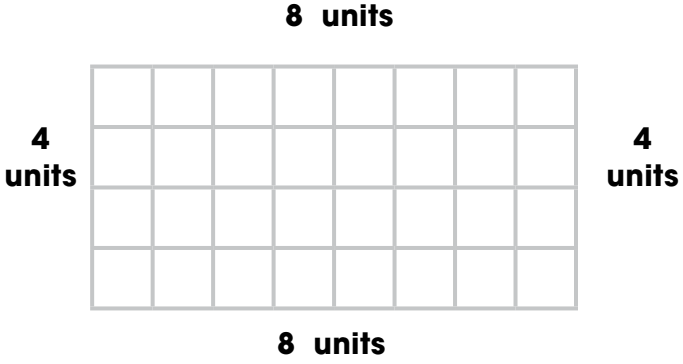
3. How many fewer pens were sold than erasers?

4 fewer pens

4. What if 2 more notebooks were also sold? Adjust the bar on the graph to show the added sales.

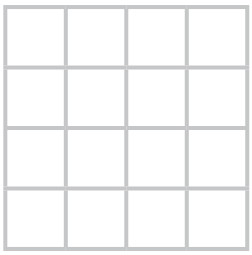
Find the perimeter of each figure.

1



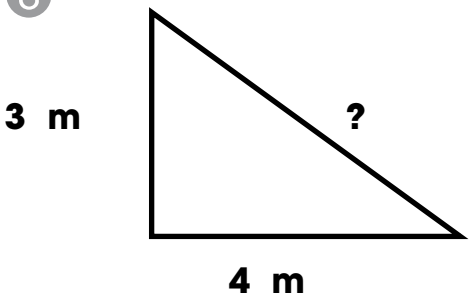
Perimeter: 24 units

2



Perimeter: 16 units

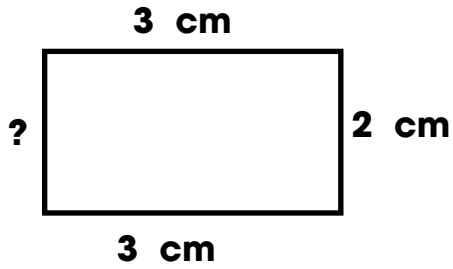
3



Perimeter: 12 meters

Missing side: 5 meters

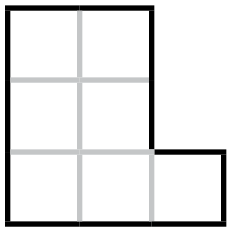
4



Missing side: 2 centimeters

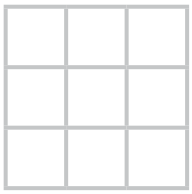
Perimeter: 10 centimeters

Find the area of each figure.

1. 

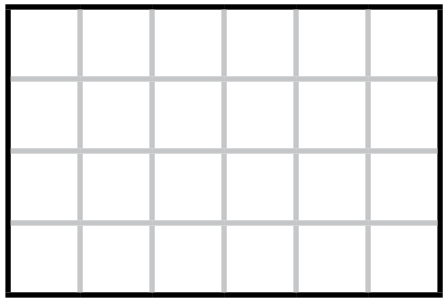
$3 + 3 + 1 = \square$

7 square units

2. 

$3 \times 3 = \square$

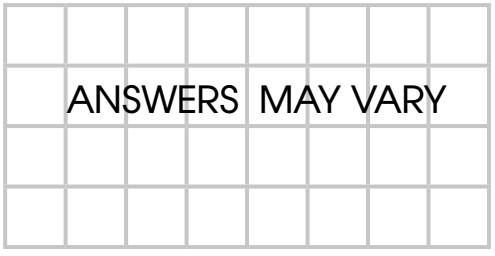
9 square units

3. 

4 x 6 = □

24 square units

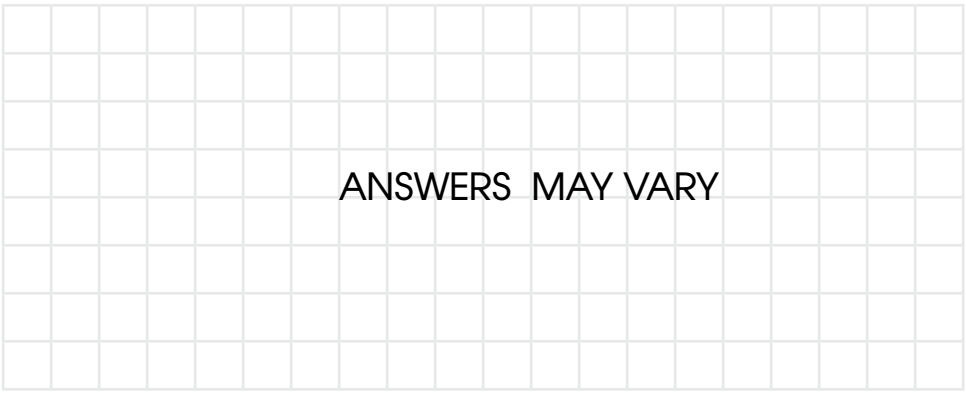
4. **Draw a figure to match the area.**



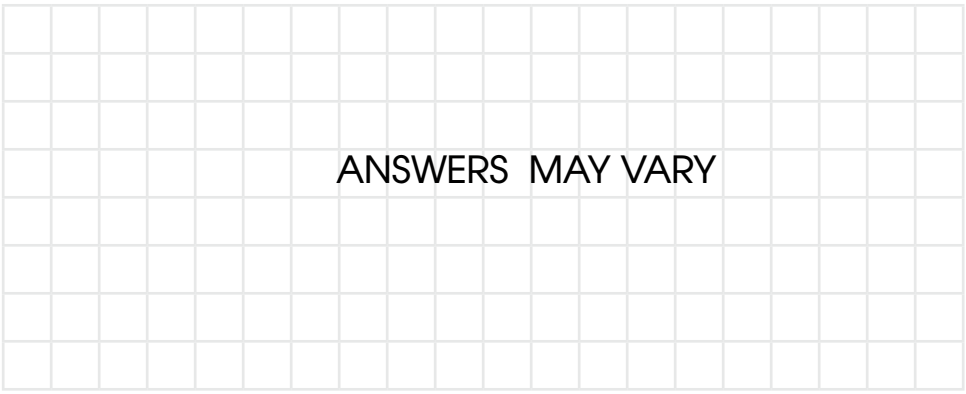
Area = 8 square units

Draw each figure.

1. quadrilateral with 4 sides of equal lengths



2. quadrilateral that is NOT a rectangle



3. quadrilateral that does NOT have 4 right angles