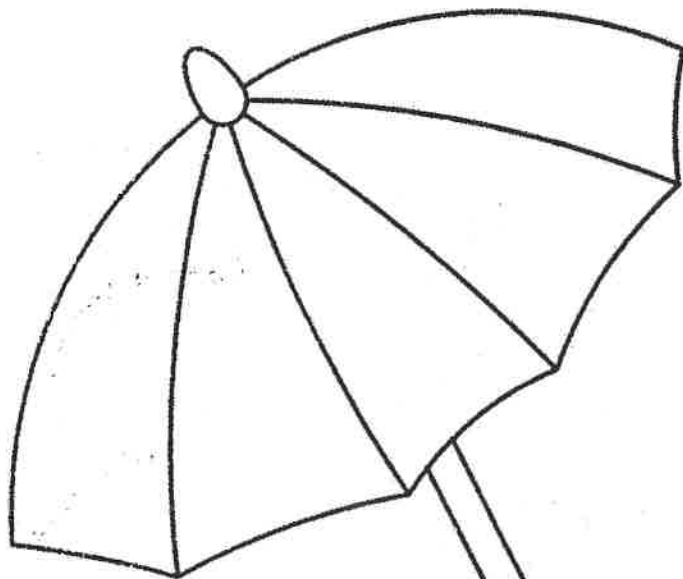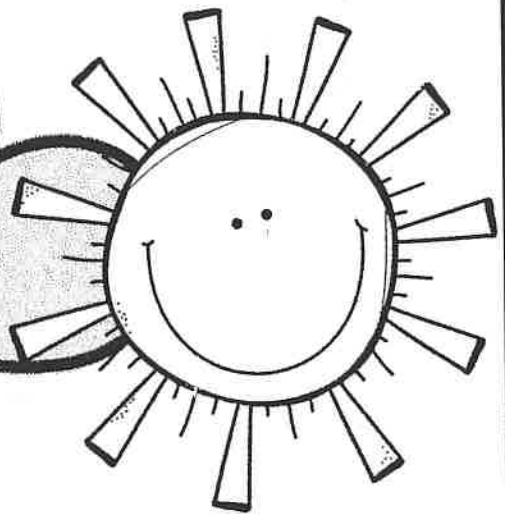# Summer Math Packet
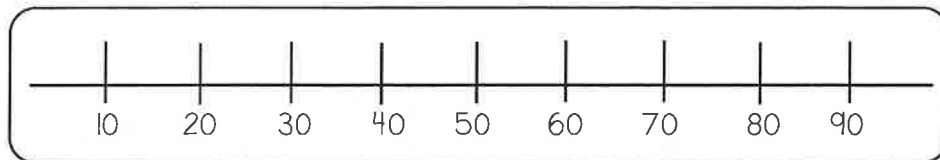
Practice your Math skills from 3rd grade this summer! Make sure to take your time because this will be your <u>first Math grade</u> in 4th grade!

Name

Rounding

Use the number line to round each number to the nearest 10.
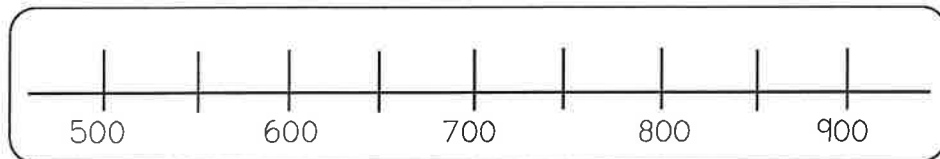
```
|    |    |    |    |    |    |    |    |    |
10   20   30   40   50   60   70   80   90
```

67 rounds to _____   89 rounds to _____

22 rounds to _____   45 rounds to _____

Use the number line to round each number to the nearest 100.

```
|    |    |    |    |    |    |    |    |    |
500     600     700     800     900
```

730 rounds to _____   803 rounds to _____

567 rounds to _____   658 rounds to _____

Underline the <u>tens place</u>, then round to the closest ten.

459 rounds to _____   1,284 rounds to _____

4, 338 rounds to _____   144 rounds to _____

Underline the <u>hundreds place</u>, then round to the closest hundred.

622 rounds to _____   867 rounds to _____

22, 567 rounds to _____   3, 709 rounds to _____

Addition & Subtraction

Use place value to add or subtract. Don't forget to <u>regroup</u> or <u>borrow</u>!

```
   738        519        258        127        973
-  227      + 347      + 565      + 290      - 869
```

```
   900        545        376         29        294
-  158      + 139      - 148      -   8      + 332
```

```
   537        734        164        437        356
-  428      - 327      + 230      + 184      + 442
```

```
    56        761        600        491        271
+   32      - 489      - 398      -  51      + 425
```

A television program lasts for 120 minutes. Of that time, 36 minutes are taken up by commercials. What is the length of the actual program without the commercials?
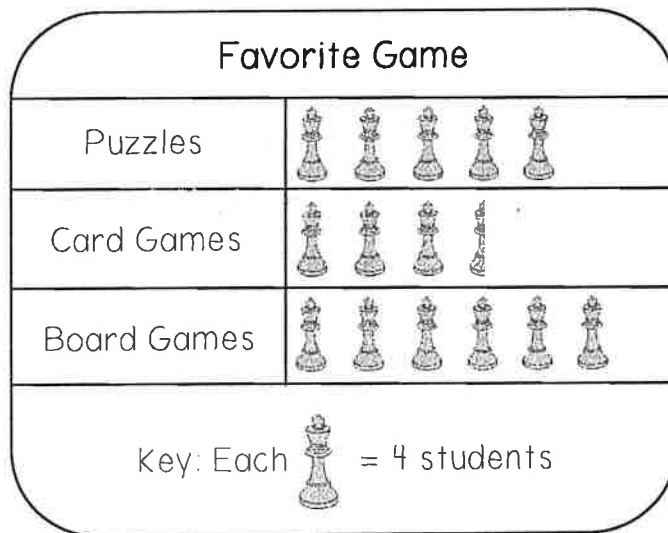
_____ minutes

Mark has 215 baseball cards. Emily has 454 baseball cards. How many baseball cards do Mark and Emily have altogether?

_____ baseball cards

Analyze Data

Answer the following questions using the pictograph below.

Favorite Game	
Puzzles	♟ ♟ ♟ ♟ ♟
Card Games	♟ ♟ ♟ ♟
Board Games	♟ ♟ ♟ ♟ ♟ ♟

Key: Each ♟ = 4 students

1. How many students chose puzzles? _____ students

2. How many fewer students chose card games than board games? _____ students

3. Which two types of games did a total of 34 students choose? _____ and _____

4. How many students were surveyed? _____ students

5. How many students did not choose card games? _____ students

6. What if computer games were added as a choice and more students chose it than puzzles, but fewer students chose it than board games? How many students could have chosen computer games? _____ students

Delia made the table at the right. She used it to record the places the third grade classes would like to go during a field trip. Use the data from the frequency chart to make a pictograph in the space below.
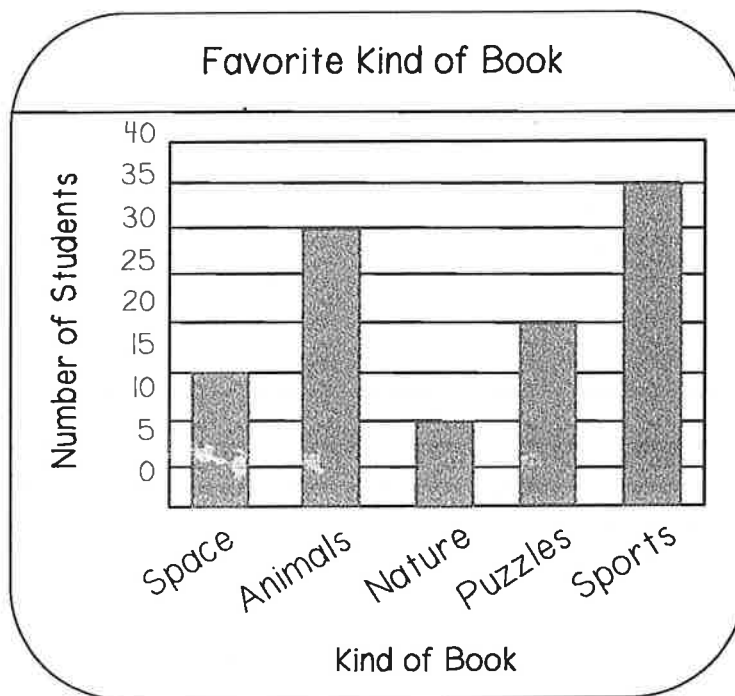
Field Trip Choices	
Museum	6
Science Center	15
Aquarium	12
Zoo	9

Key: Each _____ = _____ students

How many fewer students chose the Museum than the Science Center? _____ students

How many students would rather go to the Aquarium and Zoo? _____ students

Answer the following questions using the bar graph below.

Favorite Kind of Book

Number of Students

40
35
30
25
20
15
10
5
0

Space   Animals   Nature   Puzzles   Sports

Kind of Book

1. Which kind of book was chosen by half of the number of students as books about animals? _____

2. Did more students choose books about sports or books about animals and nature together? _____

3. Which two kinds of books together did students choose as often as books about sports? _____ & _____

4. How many more students chose sports than puzzles?

   _____ students

5. How many fewer students chose space than animals?

   _____ students

Multiplication Facts

Find the product

$$
\begin{array}{ccccccc}
8 & 7 & 3 & 5 & 7 & 4 & 12 \\
\times\ 3 & \times\ 8 & \times\ 7 & \times\ 6 & \times\ 5 & \times\ 9 & \times\ 4
\end{array}
$$

$$
\begin{array}{ccccccc}
9 & 8 & 12 & 5 & 12 & 10 & 7 \\
\times\ 9 & \times\ 6 & \times\ 7 & \times\ 2 & \times\ 8 & \times\ 12 & \times\ 9
\end{array}
$$

$$
\begin{array}{ccccccc}
7 & 12 & 11 & 6 & 8 & 7 & 4 \\
\times\ 4 & \times\ 12 & \times\ 10 & \times\ 9 & \times\ 8 & \times\ 7 & \times\ 1
\end{array}
$$

$$
\begin{array}{ccccccc}
3 & 6 & 12 & 12 & 12 & 6 & 11 \\
\times\ 4 & \times\ 2 & \times\ 3 & \times\ 9 & \times\ 6 & \times\ 7 & \times\ 11
\end{array}
$$

$5 \times 6 =$ ___ $\quad$ $9 \times 8 =$ ___ $\quad$ $12 \times 12 =$ ___ $4 \times 5 =$ ___ $\quad$ $5 \times 4 =$ ___

$2 \times 3 =$ ___ $\quad$ $6 \times 6 =$ ___ $\quad$ $3 \times 3 =$ ___ $\quad$ $1 \times 8 =$ ___ $\quad$ $9 \times 5 =$ ___

$4 \times 9 =$ ___ $\quad$ $6 \times 4 =$ ___ $\quad$ $12 \times 2 =$ ___ $\quad$ $5 \times 7 =$ ___ $\quad$ $3 \times 4 =$ ___

$5 \times 2 =$ ___ $\quad$ $12 \times 3 =$ ___ $\quad$ $8 \times 4 =$ ___ $\quad$ $10 \times 6 =$ ___ $\quad$ $1 \times 10 =$ ___

$4 \times 4 =$ ___ $\quad$ $3 \times 9 =$ ___ $\quad$ $2 \times 6 =$ ___ $\quad$ $11 \times 4 =$ ___ $\quad$ $1 \times 2 =$ ___

Division Facts

Find the quotient

$5\overline{)30}$ $2\overline{)20}$ $11\overline{)121}$ $3\overline{)36}$ $7\overline{)21}$ $6\overline{)12}$ $9\overline{)63}$

$2\overline{)24}$ $9\overline{)81}$ $7\overline{)35}$ $4\overline{)32}$ $5\overline{)45}$ $4\overline{)24}$ $8\overline{)56}$

$9\overline{)72}$ $7\overline{)42}$ $6\overline{)18}$ $3\overline{)30}$ $8\overline{)40}$ $6\overline{)54}$ $8\overline{)64}$

$3\overline{)24}$ $4\overline{)12}$ $8\overline{)72}$ $4\overline{)16}$ $7\overline{)28}$ $3\overline{)9}$ $10\overline{)100}$

$8 \div 4 =$ ___ $16 \div 2 =$ ___ $35 \div 7 =$ ___ $54 \div 6 =$ ___ $30 \div 6 =$ ___

$63 \div 7 =$ ___ $6 \div 3 =$ ___ $12 \div 2 =$ ___ $20 \div 4 =$ ___ $36 \div 4 =$ ___

$9 \div 3 =$ ___ $12 \div 6 =$ ___ $18 \div 3 =$ ___ $24 \div 4 =$ ___ $40 \div 4 =$ ___

$24 \div 6 =$ ___ $20 \div 5 =$ ___ $48 \div 8 =$ ___ $14 \div 2 =$ ___ $28 \div 4 =$ ___

Missing Factors

Solve for the missing factor.

$\triangle \times 8 = 64$ $\qquad$ $m \times 4 = 28$ $\qquad$ $5 \times \heartsuit \; 40$ $\qquad$ $w \times 7 = 35$

$\triangle =$ _____ $\qquad$ $m =$ _____ $\qquad$ $\heartsuit =$ _____ $\qquad$ $w =$ _____

$30 = d \times 3$ $\qquad$ $56 = 8 \times \bigstar$ $\qquad$ $b \times 6 = 54$ $\qquad$ $7 \times k = 42$

$d =$ _____ $\qquad$ $\bigstar =$ _____ $\qquad$ $b =$ _____ $\qquad$ $k =$ _____

Solve the equations.

$4 \times$ _____ $= 28$ $\qquad$ $7 \times$ _____ $= 35$ $\qquad$ $9 \times$ _____ $= 27$

$28 \div 4 =$ _____ $\qquad$ $35 \div 7 =$ _____ $\qquad$ $27 \div 9 =$ _____

$4 \times$ _____ $= 36$ $\qquad$ $8 \times$ _____ $= 40$ $\qquad$ $2 \times$ _____ $= 16$

$36 \div 4 =$ _____ $\qquad$ $40 \div 8 =$ _____ $\qquad$ $16 \div 2 =$ _____

Use fact families to help you find the missing number.

$4 \times 9 =$ _____ $\qquad$ _____ $\times 7 = 35$ $\qquad$ $6 \times$ _____ $= 18$

_____ $\times 4 = 36$ $\qquad$ $5 \times$ _____ $= 35$ $\qquad$ $3 \times 6 =$ _____

$36 \div$ _____ $= 9$ $\qquad$ _____ $\div 7 = 5$ $\qquad$ $18 \div$ _____ $= 3$

_____ $\div 9 = 4$ $\qquad$ $35 \div 5 =$ _____ $\qquad$ _____ $\div 3 = 6$

Problem Solving

Solve the problems below. Write a multiplication or division equation.

Marcia is makings 4 cheese sandwiches. If she puts 2 slices of cheese on each sandwich, how many slices of cheese does Marcia use in all?

_____ ◯ _____ = _____ slices of cheese

Thomas works in a cafeteria kitchen. If he makes 5 salads with 3 cherry tomatoes on each salad, how many tomatoes does he use?

_____ ◯ _____ = _____ cherry tomatoes

Mrs. Costa has 18 pencils. She gives 9 pencils to each of her children for school. How many children does Mrs. Costa have?

_____ ◯ _____ = _____ children

Mary decides to plant 24 rose bushes in her garden. She places 6 bushes in each row How many rows of rose bushes does she plant in her garden?

_____ ◯ _____ = _____ rows

Problem Solving

Solve the 2-step problems below. Use +, - x, or ÷ .

Of 77 third graders, on Monday 3 were absent from Room 101, 4 were absent from Room 102, and 2 were absent from Room 103. How many third graders attended school that day?

_____ ◯ _____ ◯ _____ = _____

_____ ◯ _____ = _____ students attended school

Ms. Diaz gave 5 toothpicks to each of 9 children for an art project. The full box she started with held 100 toothpicks. How many toothpicks did she have left?

_____ ◯ _____ = _____

_____ ◯ _____ = _____ toothpicks

Each month for 7 months, Eva reads 3 books. How many more books does she need to read before she has read 30 book?

_____ ◯ _____ = _____

_____ ◯ _____ = _____ books

Telling Time

Write the time that is shown on the clock, or draw the hands to shown the given time.
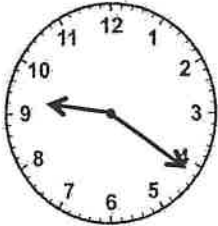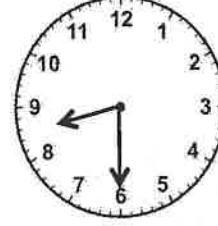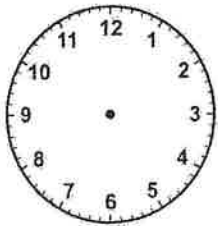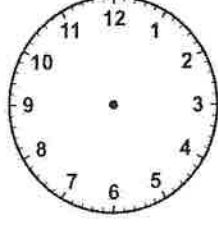
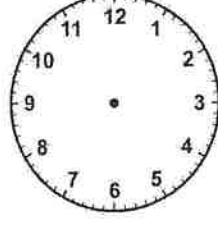12: 34   6. 56   10:20   2:15

What time will it be in 20 minutes if it is now...

2:10 ____:_____   8:15 ____:_____   7:35 ____:_____

What time will it be in 2 hours, 15 minutes if it is now...

6:30 ____:_____   3:35 ____:_____   4:25 ____:_____

Solve the problem and make sure to show your work.

Hannah wants to meet her friends at the mall. Before leaving home, she does her chores for 60 minutes and eats lunch for 20 minutes. The walk downtown takes 15 minutes. Hannah starts her chores at 11:45 A.M. At what time does she meet her friends?

_____:_____

Mass & Capacity

Decide which unit would best be used to measure the mass of each object: grams (g) or Kilograms (Kg). Circle your answer.

cell phone: (g) (kg)   large dog: (g) (kg)   pencil: (g) (kg)

Circle the best estimate for the mass of each object.

refrigerator   A. 90 kilograms   B. 40 grams   C. 8 kilograms

an apple   A. 4 kilograms   B. 200 grams   C. 2 grams

a key   A. 1 gram   B. 4 kilograms   C. 100 grams

Decide which unit would best be used to measure each: milliliter (mL) or liter (L).

carton of milk: (mL) (L)   juice in a baby's bottle: (mL) (L)

water in a bathtub: (mL) (L)   medicine: (mL) (L)

Circle the best estimate for the liquid volume of each.

syrup for 2 pancakes   A. 25 mL   B. 2 mL   C. 2 L

soda in a can   A. 2 L   B. 350 mL   C. 350 L

liquid in a spoon   A. 5 L   B. 5 mL   C. 500 mL

Solve.
Louis was served 145 grams of meat and 217 grams of vegetables at a meal. What was the total mass of the meat and vegetables?

_____ grams

Fractions

Write the fraction that names each picture.

$\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$
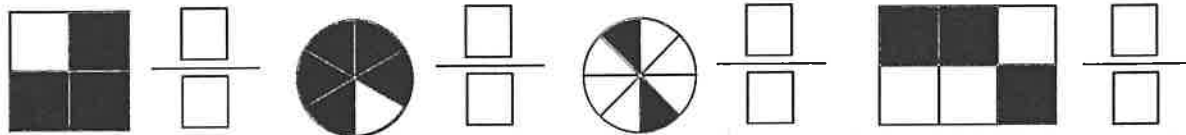
Color in each picture to represent the fraction.

$\dfrac{5}{8}$ $\dfrac{3}{6}$ $\dfrac{1}{4}$ $\dfrac{2}{3}$
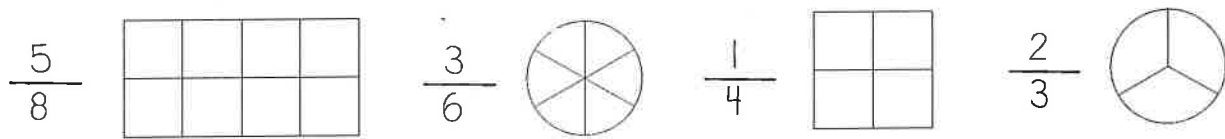
Fill in the missing fractions on the number line. Then answer the questions that follow.

A   B

$\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$ $\dfrac{\square}{\square}$

0   1
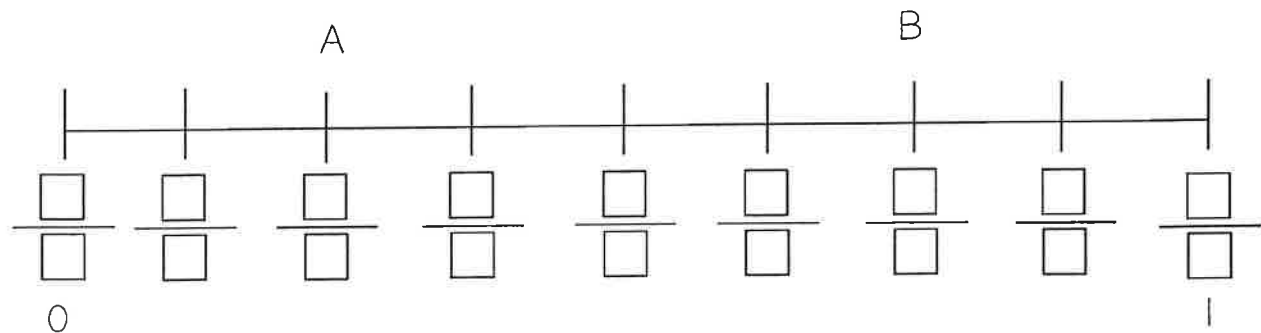
How many parts is the number line broken into? _____ parts

How far is from point A to B on the number line? $\dfrac{\square}{\square}$

Which fraction represents the number 1 on the number line? $\dfrac{\square}{\square}$

Fractions

Compare each set of fractions using <, >, or =. Color in the pictures below to help you solve.
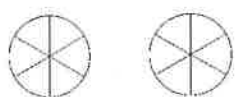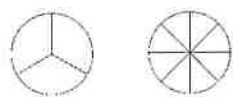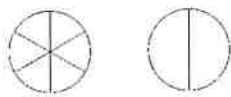
$\frac{3}{6}$ ◯ $\frac{6}{6}$ $\frac{1}{3}$ ◯ $\frac{1}{8}$ $\frac{1}{6}$ ◯ $\frac{1}{2}$ $\frac{3}{4}$ ◯ $\frac{1}{4}$
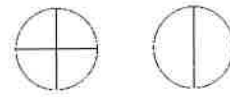
Write an equivalent fraction. Color in each picture to represent the equivalent fractions.
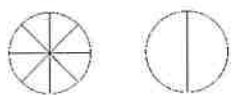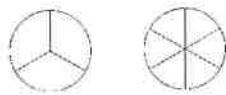
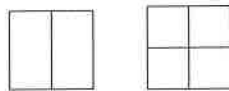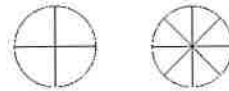$\frac{4}{8}$ = ___ $\frac{1}{3}$ = ___ $\frac{2}{2}$ = ___ $\frac{3}{4}$ = ___

Find equivalent fractions using the number lines to locate each point.

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

$\frac{4}{6}$ = $\frac{}{3}$
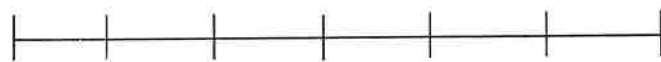
Measurement

Count the tiles to find the area of each figure.
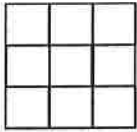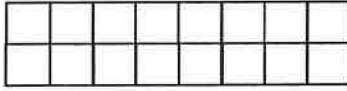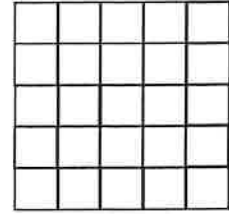
A = _____ square units   A = _____ square units   A = _____ square units

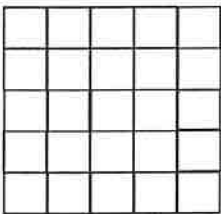Write a repeated addition and multiplication sentence to find the area of the figure.

Addition
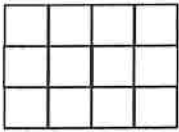
___ + ___ + ___ = ___ square units
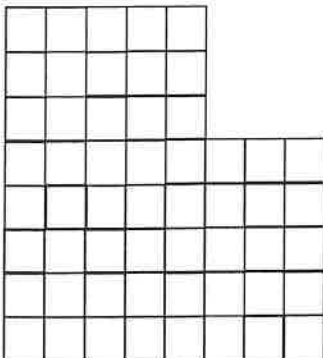
Multiplication

___ x ___ = ___ square units

Break up the rectangle into two rectangles by coloring it in two different colors to find the area of the figure.

Rectangle 1: ___ x ___ = ___

Rectangle 2: ___ x ___ = ___
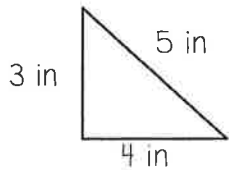
___ + ___ = ___ square units

Rectangle 1 ___ x ___ = ___
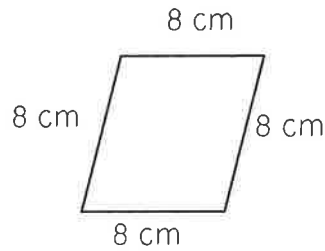
Rectangle 2 ___ x ___ = ___

___ + ___ = ___ square units

Measurement

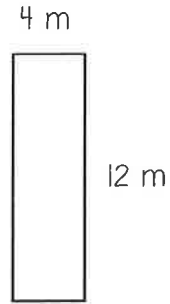Find the perimeter of each polygon.

8 cm

5 in

3 in

4 in

8 cm   8 cm

8 cm

4 m

12 m

P = _____ inches

P = _____ centimeters

P = _____ meters

CHALLENGE

Find the unknown side length and/or perimeter of each polygon.

7 in

10 in

x   15 in

3 m

y

10 m   7 m

4 m

10 m
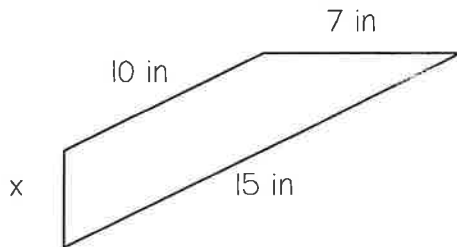
P = 27 inches

x = _____ inches
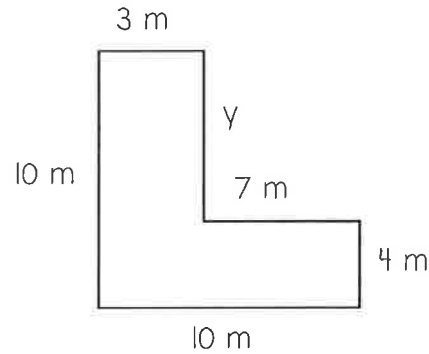
y = _____ meters

P = _____ meters

Ryan has a rectangular playroom with a perimeter of 26 feet. The length of the playroom is 6 feet. What is the width of the playroom? Use the picture to help you solve.

The width is _____ feet
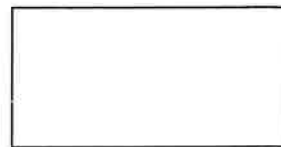
Geometry

Cut out the pictures on the following page and paste them under the correct heading. Then, answer the questions that follow.
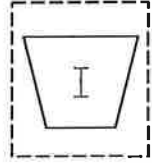
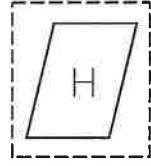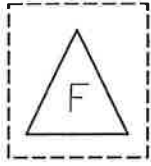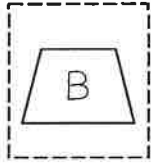| Quadrilaterals	Not Quadrilaterals

Which figure(s) can be classified as a rhombus? _____

Which figure(s) can be classified as a rectangle? _____

Which figure(s) can be classified as a trapezoid? _____

Which figure(s) can be classified as a square? _____

What do all quadrilaterals have in common?

_____

_____

_____
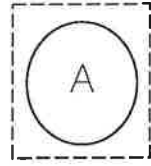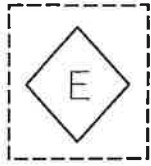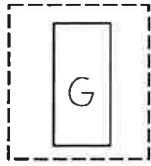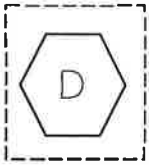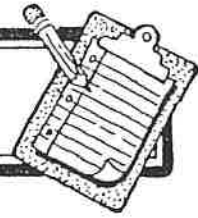
D

G

E

A

C

J

B

F

H

I
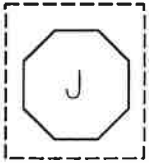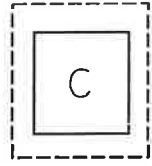
MULTIPLICATION TABLE WORK SHEET

Name _____

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