My Summer Math Packet

SCHOOL

CLOSED FOR THE SUMMER

HICKS

Grade 3

Name_____

Master multiplication through 10 x 10.

Goal: Solve <u>all</u> the problems correctly in under 2 minutes.

Directions: Have someone time you on the challenge below. Practice your multiplication flashcards and try the challenge again as you work through this packet.

9x9=___	8x8=___	7x1=___	6x1=___	9x4=___
4x4=___	9x8=___	8x7=___	9x3=___	7x2=___
6x2=___	7x3=___	9x7=___	8x6=___	5x5=___
7x4=___	9x2=___	6x3=___	9x6=___	8x5=___
9x1=___	5x4=___	6x4=___	7x5=___	9x5=___
8x4=___	4x3=___	7x6=___	6x5=___	5x3=___
4x2=___	8x3=___	5x2=___	4x1=___	6x6=___
7x7=___	5x1=___	8x2=___	3x3=___	8x1=___

How many problems did you solve correctly in 2 minutes? _____

*Counters for this activity can be pennies, macaroni, bingo chips, paper clips, etc.
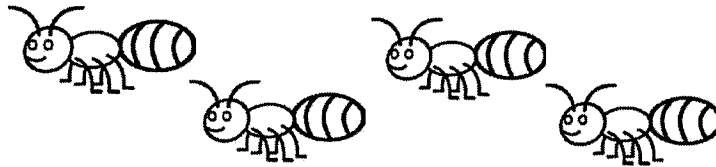
Ant Antics

Use __24 counters__ to stand for ants. Form the ants into the patterns below. Draw a picture of each solution.

1. One solid rectangle, with three equal rows of ants

2. One solid rectangle, with four equal rows of ants

3. Two solid rectangles, each exactly the same size

4. Six small squares, with the same number of ants in each square

5. One hollow rectangle, with nine ants on each long side and five ants on each short side

6. One hollow triangle, with the same number of ants on each side

7. Four small triangles, with the same number of ants in each triangle

8. Three solid triangles—one with three ants, one with six ants and one with 15 ants

▶▶▶ Make your own shape. Then describe your shape.

Fill in the blanks.

Day at the Beach

_____,
(name of a boy or girl)

_____, and
(name of a boy or girl)

_____ went to
(name of a boy or girl)

_____ Beach. They brought _____
(noun)   (number greater than 1)

umbrellas and _____ beach blankets. They also
(number greater than 1)

had _____ buckets to collect shells. They found shells
(number from 6 to 9)

shaped like _____ and shells that looked like
(plural noun)

_____. Altogether, they had _____ shells
(plural noun)   (number from 6 to 9)

in each bucket. After collecting shells, it was time for a snack. Everyone

enjoyed _____and some ice-cold _____.
(type of food, plural)   (type of liquid)

It was a very _____ day at the beach!
(adjective)

Questions:

How many umbrellas and beach blankets did they bring? _____

How many shells did they have in all? _____

Practice your addition facts.

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

Practice your subtraction facts.

10	9	8	3	4	13
- 2	- 0	- 7	- 3	- 3	- 5

6	10	4	9	4	8
- 3	- 7	- 1	- 2	- 0	- 6

8	7	6	15	1	6
- 8	- 3	- 0	- 8	- 1	- 2

11	11	18	13	4	7
- 9	- 8	- 9	- 9	- 2	- 5

14	7	7	2	7	17
- 8	- 1	- 2	- 1	- 0	- 9

5	10	9	9	5	12
- 3	- 5	- 3	- 9	- 2	- 9

13	8	15	10	3	1
- 6	- 2	- 7	- 3	- 0	- 0

Add and subtract as you follow the paths. Put your final answers at each finish line.

Take a Hike!

START

10

− 3

+ 5

− 4

+ 8

− 2

+ 6

− 3

+ 7

+ 10

− 9

+ 9

+ 4

− 5

− 13

FINISH

FINISH

FINISH

FINISH

FINISH

7

Round to the nearest <u>ten</u> above and below, and circle the rounded number that is closest to the given number.

1) (70)   74   80   6) 540   548   (550)

2) _____   41   _____   7) _____   322   _____

3) _____   62   _____   8) _____   548   _____

4) _____   47   _____   9) _____   599   _____

5) _____   97   _____   10) _____   148   _____

Round to the nearest <u>hundred</u> above and below, and circle the rounded number that is closest to the given number.

1) (400)   431   500   6) _____   645   _____

2) _____   811   _____   7) _____   416   _____

3) _____   656   _____   8) _____   956   _____

4) _____   735   _____   9) _____   618   _____

5) _____   812   _____   10) _____   389   _____
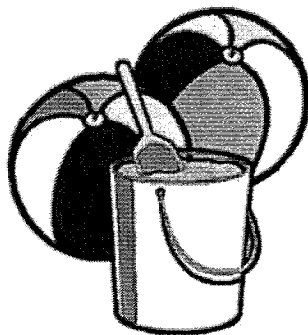
Estimate the difference by rounding each number to the nearest ten.

1)   64 $\longrightarrow$
     - 53 $\longrightarrow$ - ___

4)   84 $\longrightarrow$
     - 34 $\longrightarrow$ - ___

2)   45 $\longrightarrow$
     + 44 $\longrightarrow$ + ___

5)   51 $\longrightarrow$
     - 15 $\longrightarrow$ - ___

3)   92 $\longrightarrow$
     + 81 $\longrightarrow$ + ___

6)   34 $\longrightarrow$
      23    $\longrightarrow$ + ___

Estimate the sum or difference by rounding each number to the nearest hundreds.

1)   546 $\longrightarrow$
     + 722 $\longrightarrow$ + ___

3)   812 $\longrightarrow$
     - 278 $\longrightarrow$ - ___

2)   923 $\longrightarrow$
     - 653 $\longrightarrow$ - ___

4)   172 $\longrightarrow$
     + 281 $\longrightarrow$ + ___

3)   812 $\longrightarrow$
     - 278 $\longrightarrow$ - ___

5)   667 $\longrightarrow$
     + 557 $\longrightarrow$ + ___

9

Let's try multiplication again.
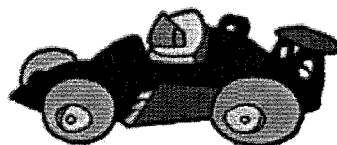## Goal: Solve <u>all</u> the problems correctly in under 2 minutes.

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4x4=____	9x8=____	8x7=____	9x3=____	7x2=____
6x2=____	7x3=____	9x7=____	8x6=____	5x5=____
7x4=____	9x2=____	6x3=____	9x6=____	8x5=____
9x1=____	5x4=____	6x4=____	7x5=____	9x5=____
8x4=____	4x3=____	7x6=____	6x5=____	5x3=____
4x2=____	8x3=____	5x2=____	4x1=____	6x6=____
7x7=____	5x1=____	8x2=____	3x3=____	8x1=____

How many problems did you solve correctly in 2 minutes? ____

10

Solve by decomposing numbers to make tens.
Fill in the boxes.

1.	$34 \rightarrow 34 - 3 \rightarrow 31$ $+17 \rightarrow 17 + 3 \rightarrow +20$ $\boxed{}$
2.	$67 \rightarrow 67 - 1 \rightarrow \boxed{}$ $-29 \rightarrow 29 + 1 \rightarrow +\boxed{}$ $\boxed{}$
3.	$48 \rightarrow 48 + \square \rightarrow 50$ $+23 \rightarrow 23 - \square \rightarrow +21$ $\boxed{}$
4.	$74 \rightarrow 74 - \square \rightarrow 70$ $-36 \rightarrow 36 + \square \rightarrow +40$ $\boxed{}$
5.	$57 \rightarrow 57 + \square \rightarrow \boxed{}$ $+35 \rightarrow 35 - \square \rightarrow +\boxed{}$ $\boxed{}$

Find the sum.

559	748	881	681	718
+ 328	+ 461	+ 426	+ 758	+ 542

891	608	437	645	357
+ 772	+ 958	+ 678	+ 468	+ 294

Find the difference.

552	488	370	675	622
- 146	- 117	- 140	- 354	- 453

490	984	587	847	906
- 454	- 456	- 107	- 464	- 210

Oops! A messy math student spilled jelly all over these math problems! Can you figure out which numbers are hidden?

A.
$$16$$
$$+ \boxed{}$$
$$26$$

B.
$$2\boxed{}$$
$$- \boxed{}4$$
$$14$$

C.
$$2\boxed{}$$
$$+ 6\boxed{}$$
$$119$$

D.
$$\boxed{}5\boxed{}$$
$$- 1\boxed{}3$$
$$253$$

E.
$$\boxed{}9$$
$$+ 2\boxed{}$$
$$105$$

F.
$$32$$
$$- 1\boxed{}$$
$$18$$

G.
$$3\boxed{}$$
$$+ 22$$
$$\boxed{}0$$

H.
$$8\boxed{}$$
$$- \boxed{}5$$
$$29$$
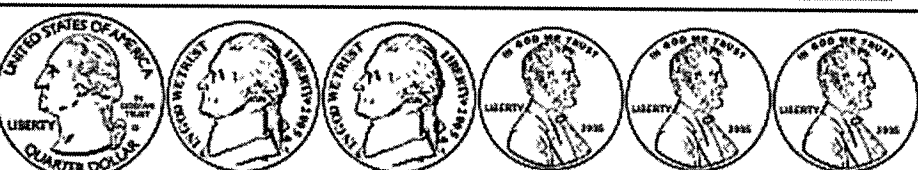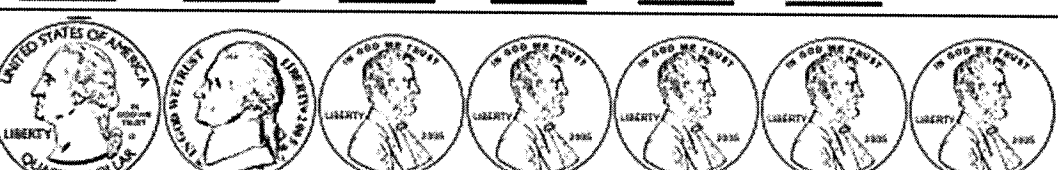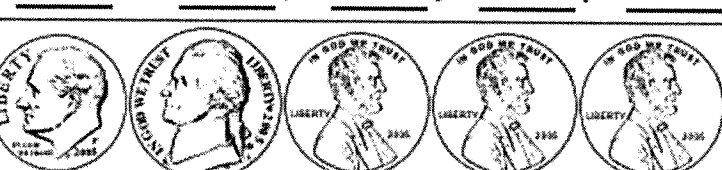
▶▶▶ Make one messy addition and one messy subtraction of your own. Challenge a friend to solve them.
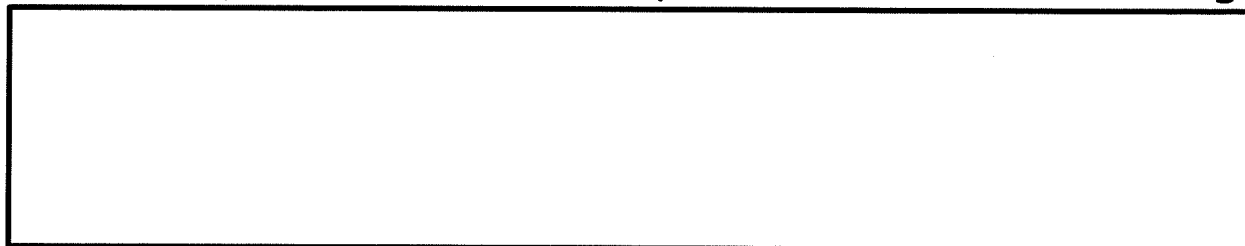
I.

J.

13
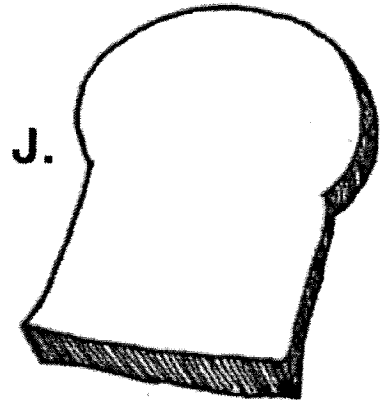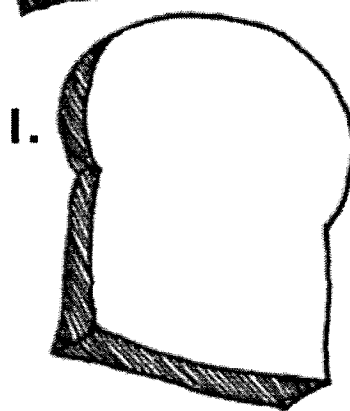
Count the change.

1) _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

2) _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

3) _____¢   _____¢   _____¢   _____¢   **Total** _____

4) _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

5) _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

6) _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

7) _____¢   _____¢   _____¢   _____¢   _____¢   **Total** _____

14

Let's go out to lunch!

SANDWICHES AND MORE

Hamburger $1.75
   with cheese . . . . $0.10 extra
Hot Dog $1.25
Peanut Butter and Jelly $1.05
Bean Burrito $1.95
Turkey Burger $1.55
Spaghetti and Meatballs. $2.15
Tuna $1.45
Grilled Cheese $1.65
Mini-Pizza. $2.10

SIDE ORDERS

French Fries $0.75
Potato Chips. $0.45
Garden Salad $1.10
Carrot Sticks. $0.65

DRINKS

Milk. $0.65
Soda $0.65
Orange or Apple Juice $0.70
Lemonade. $0.55

DESSERTS

Ice Cream Sundae $2.25
Fruit Salad $1.55

Brownie. $0.95
Chocolate Chip Cookies (2) . . . $0.85

1. How much is a hot dog and a milk? _____

2. How much is a grilled cheese, French fries, and a soda? _____

3. How much is a mini-pizza, brownie, and a lemonade?_____

4. If you paid for question 3 with a $5.00 bill how much change should you get back?_____

Draw the possible bills/coins you could receive as change.

Jacob asked his friends what their favorite toy was. He made the tally chart below.

Favorite Toy	
Bike	JHT
Guitar	IIII
Video Game	JHT IIII
Doll	II

Shade in the bar graph using the tally chart data.

10				
8				
6				
4				
2				
	Bike	Guitar	Video Game	Doll
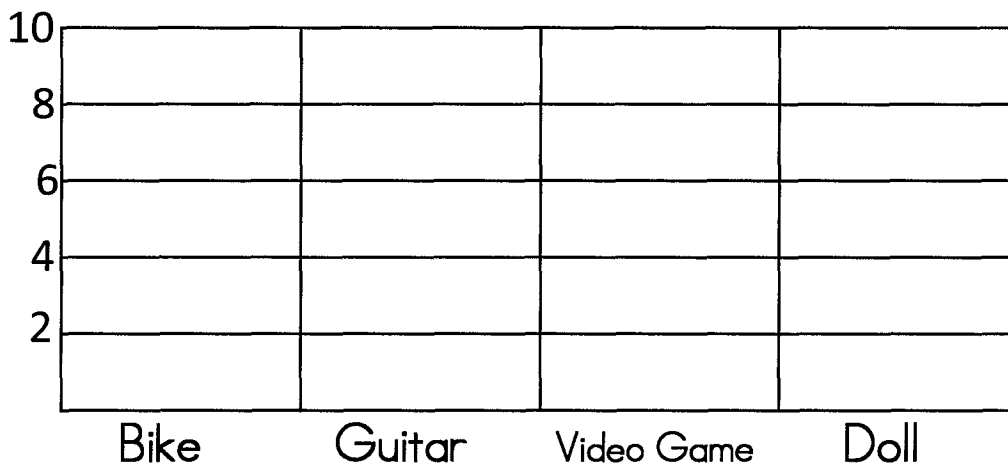
1. How many people chose bike as their favorite toy? _____

2. What toy got the most votes? _____

3. How many people chose doll and guitar? _____

4. How many more people chose video game than bike? _____

5. How many people in all answered the survey? _____

16

Let's try multiplication again.

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6x2=____	7x3=____	9x7=____	8x6=____	5x5=____
7x4=____	9x2=____	6x3=____	9x6=____	8x5=____
9x1=____	5x4=____	6x4=____	7x5=____	9x5=____
8x4=____	4x3=____	7x6=____	6x5=____	5x3=____
4x2=____	8x3=____	5x2=____	4x1=____	6x6=____
7x7=____	5x1=____	8x2=____	3x3=____	8x1=____

How many problems did you solve correctly in 2 minutes? ____

Write the quotient for each problem.
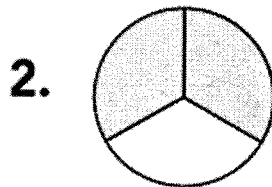Then color according to the key at the bottom.

$8\div4=$
$0\div8=$
$8\div8=$
$4\div1=$
$45\div5=$
$35\div5=$
$16\div4=$

$35\div7=$
$49\div7=$
$12\div2=$
$0\div8=$

$12\div4=$
$63\div7=$
$36\div6=$

$12\div6=$
$0\div5=$
$36\div4=$
$56\div8=$

$40\div8=$
$24\div6=$
$18\div3=$
$21\div7=$

$18\div9=$
$12\div3=$
$9\div9=$
$18\div6=$

$27\div3=$
$7\div7=$

$25\div5=$
$0\div7=$
$64\div8=$
$72\div9=$
$6\div2=$
$63\div9=$

$15\div3=$
$24\div4=$
$54\div9=$
$48\div8=$
$10\div5=$
$6\div1=$
$42\div7=$
$30\div5=$
$16\div8=$

$14\div7=$
$28\div4=$
$24\div3=$
$18\div2=$
$16\div2=$
$8\div2=$
$4\div4=$
$28\div7=$

$45\div9=$
$0\div4=$
$36\div9=$
$21\div3=$
$0\div6=$

Blue	0, 4, 7	Green	1
Red	3	Brown	2, 5
Yellow	6	Pink	9
Violet	8		

18
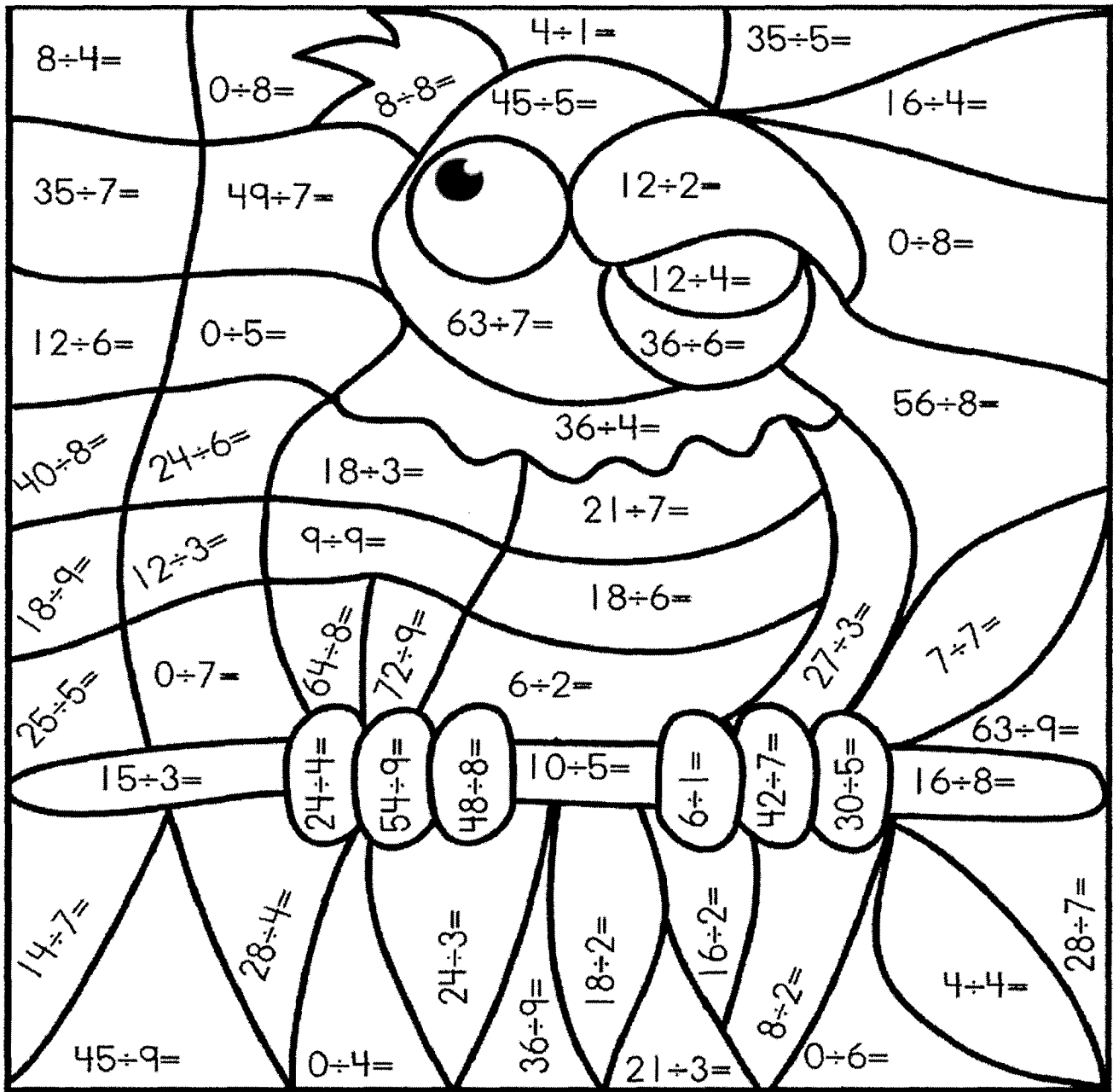
What fraction of the shape is shaded?

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____
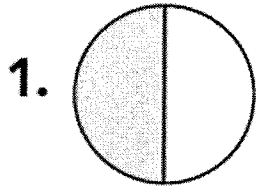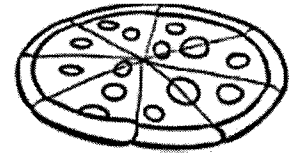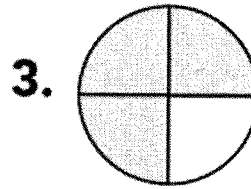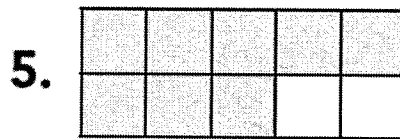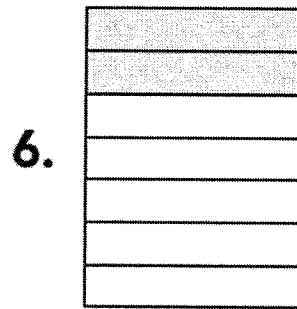
Compare the fractions. Use < or >.

1. $\frac{1}{4}$ ☐ $\frac{1}{5}$

2. $\frac{4}{6}$ ☐ $\frac{3}{4}$

3. $\frac{1}{4}$ ☐ $\frac{3}{8}$

4. $\frac{3}{6}$ ☐ $\frac{1}{3}$

5. $\frac{2}{8}$ ☐ $\frac{2}{4}$

6. $\frac{1}{2}$ ☐ $\frac{1}{3}$

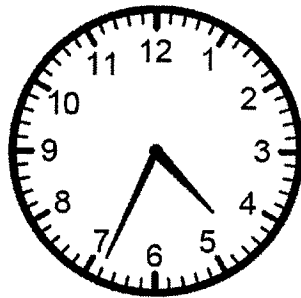7. $\frac{2}{10}$ ☐ $\frac{3}{5}$

8. $\frac{1}{4}$ ☐ $\frac{5}{8}$

9. $\frac{1}{5}$ ☐ $\frac{1}{3}$

10. $\frac{1}{6}$ ☐ $\frac{2}{9}$
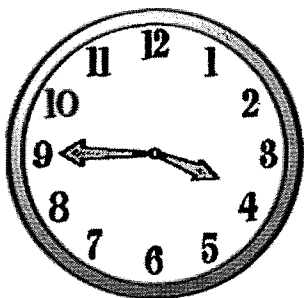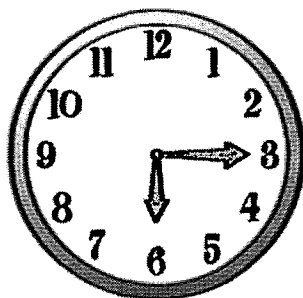
19

What time is it?
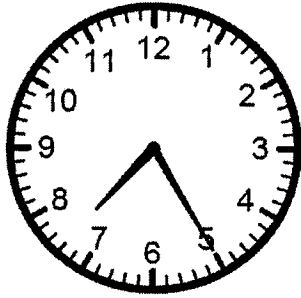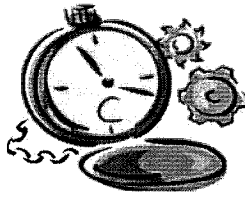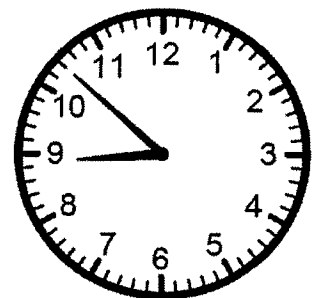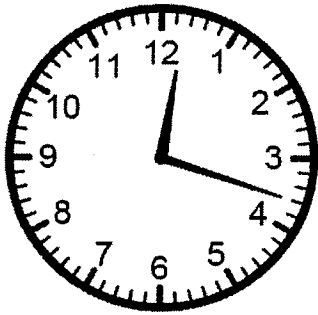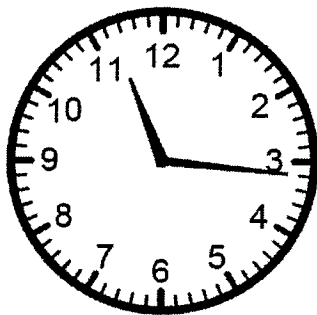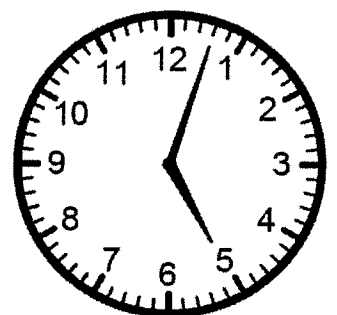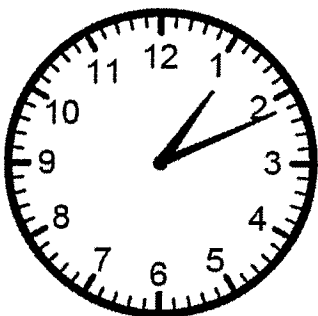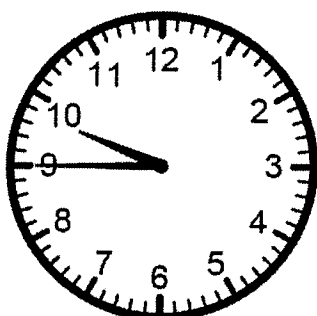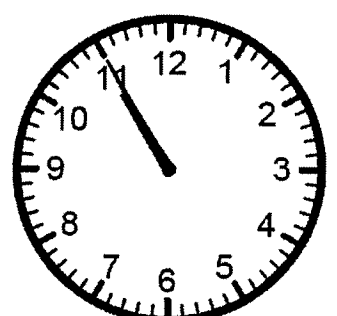
Time for a Riddle!
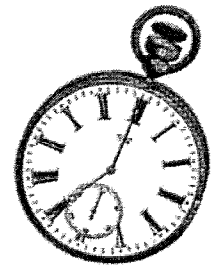
Read the riddle. To find the answer, find the clockface that matches the time written under each blank line. Then write the letter under that clockface on the blank line.

Riddle: What did the little hand on the clock say to the big hand?
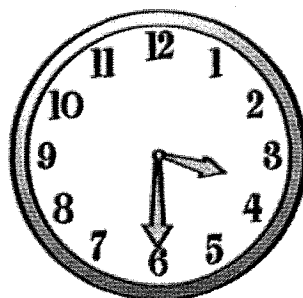
Answer: "___ ___ ___ ___   ___ ___ ___
10:00 3:30 3:30 6:05   2:25 3:45 6:15

___ ___ ___ ___ ___ ___ !"
4:45 6:05 2:55 3:45 3:45 2:55

O **U** **E** **N**

T **Y** **M** **A**

21
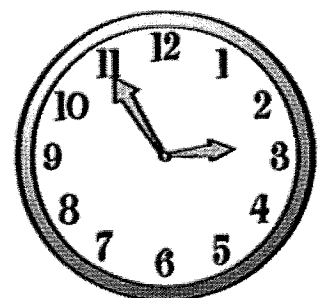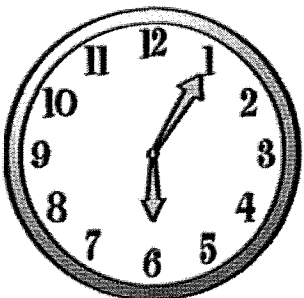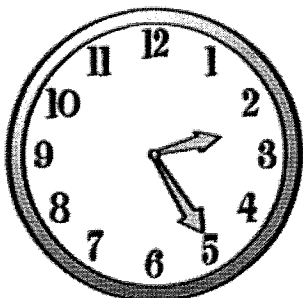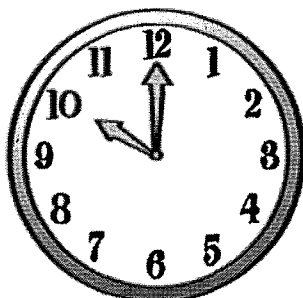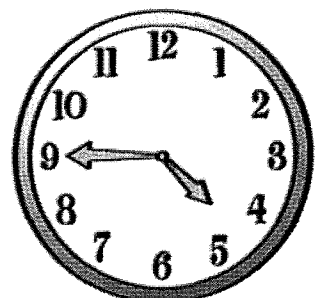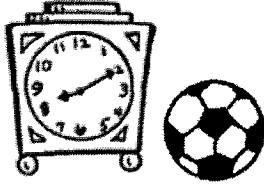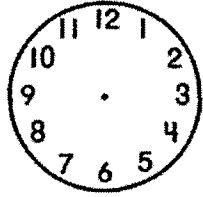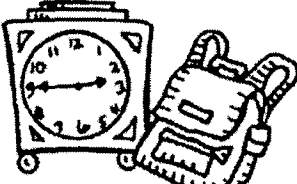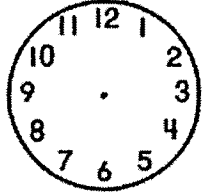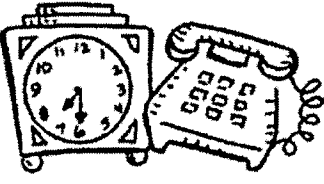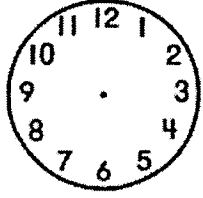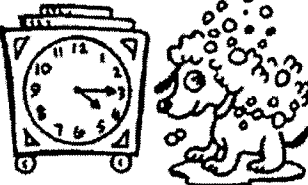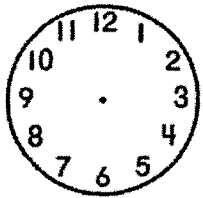
Look at the time on each clock. Then read and solve
the problem. Write your answer on the lines. Then
draw hands on the blank clock to show that time.

1 It takes Jennie 20 minutes
to get to soccer practice.

What time will
she get there? _____:_____

2 Parker's mom picks him up after
school. School ends in 30 minutes.

What time will
she pick him up? _____:_____

3 Kyra talks on the phone
for 15 minutes each night.

What time will her
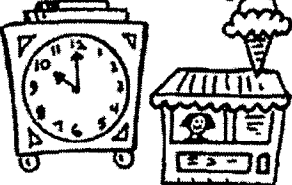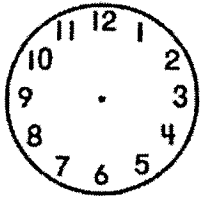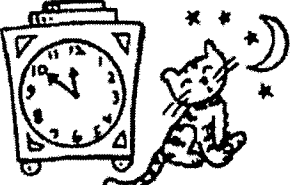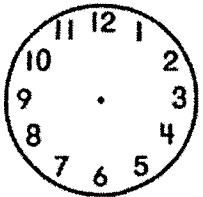phone call end? _____:_____

4 Milo gets washed every
Tuesday for 45 minutes.

What time will
his bath end? _____:_____

5 Terrance works $1\frac{1}{2}$ hours
every Saturday.

What time will
he go home? _____:_____

6 Every night, Sasha sings to
the moon for 25 minutes.

What time will
she stop singing? _____:_____

Measurement

U.S. Customary	Metric

Length
inch (in.)
12 inches = 1 foot (ft.)
3 feet = 1 yard (yd.)

Length
centimeter (cm)
100 centimeters = 1 meter (m)

Weight
ounce (oz.)
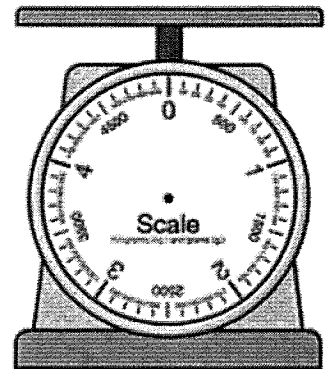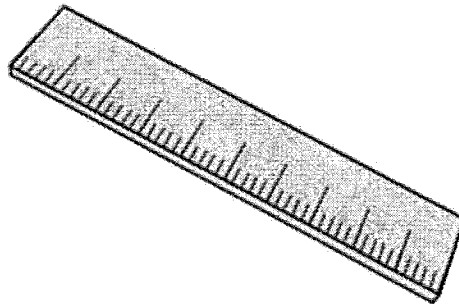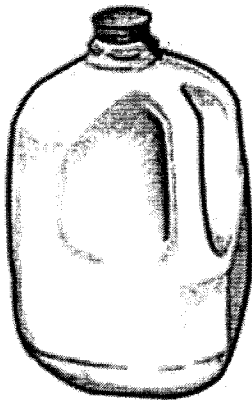16 ounces = 1 pound (lb.)
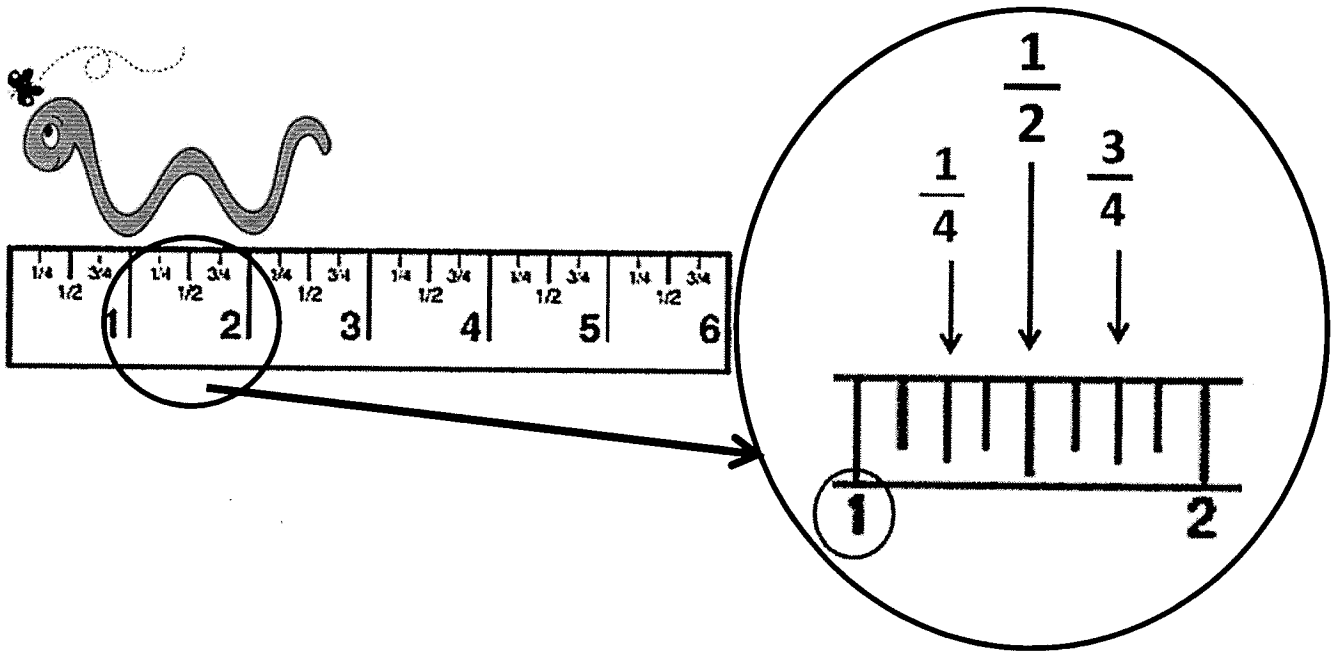
Weight
gram (g)
1,000 grams = 1 kilogram (kg)

Liquid
fluid ounce (fl. oz.)
8 fluid ounces = 1 cup (c.)
2 cups = 1 pint (pt.)
2 pints = 1 quart (qt.)
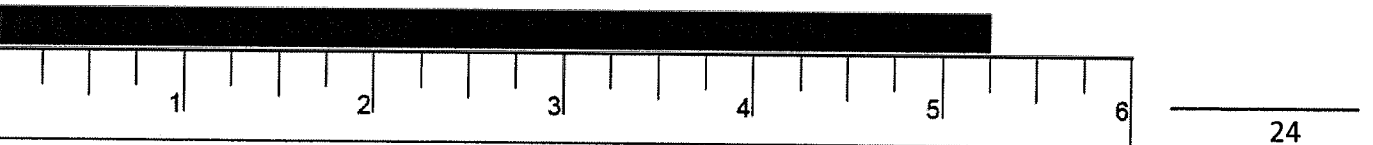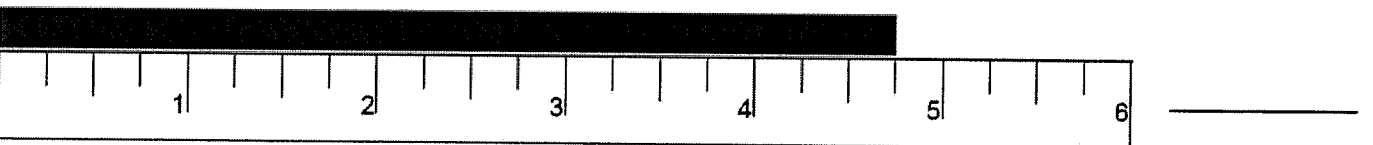4 quarts = 1 gallon (gal.)

Liquid
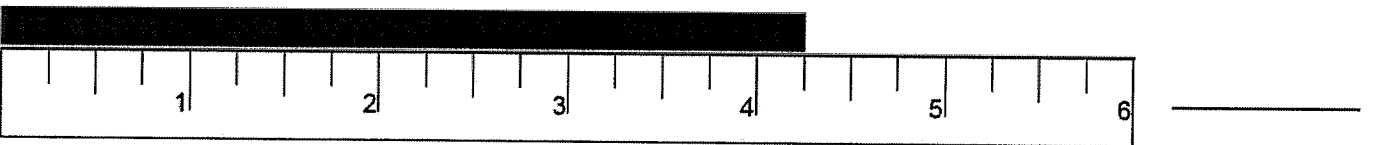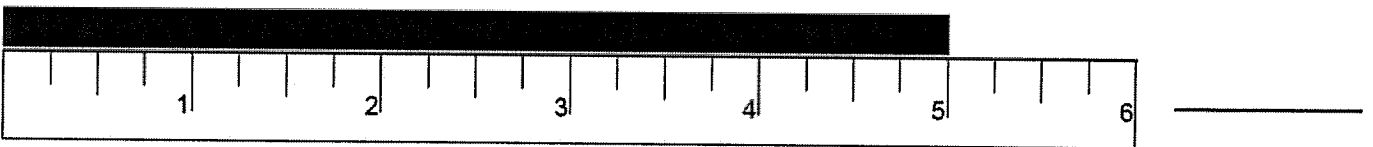milliliter (ml)
1,000 milliliters = 1 liter (l)

Scale

Use the ruler to measure to the nearest $\frac{1}{4}$ inch.

_____

_____

_____

_____

_____

24
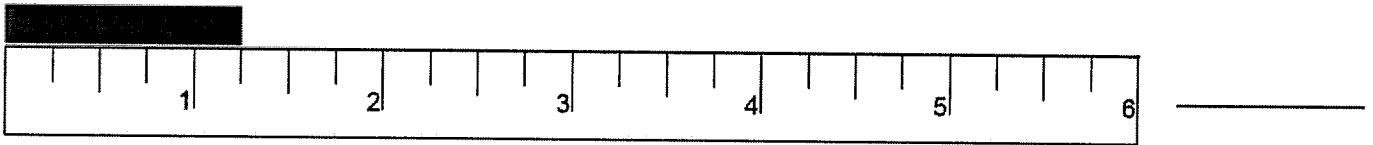
Select the appropriate unit of length.

1. Height of a two story home

    A. 12 inches

    B. 12 feet

    C. 12 yards

    D. 12 miles

2. Height of a can of soda

    A. 4 inches

    B. 4 feet

    C. 4 yards

    D. 4 miles

3. Length of a classroom.

    A. 24 inches

    B. 24 feet

    C. 24 yards

    D. 24 miles

4. Distance from New York City to Los Angeles

    A. 2,448 inches

    B. 2,448 feet

    C. 2,448 yards

    D. 2,448 miles

Circle the appropriate unit of weight/mass.

1. A large television

    pounds   ounces

2. A desk stapler

    pounds   ounces

3. A bar of soap

    pounds   ounces

4. A set of encyclopedias

    pounds   ounces

Color GallonBot as follows:

gallons – red   quarts – green   pints – blue   cups - purple

Use the graphic below to answer the questions.
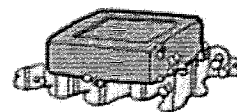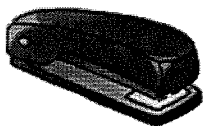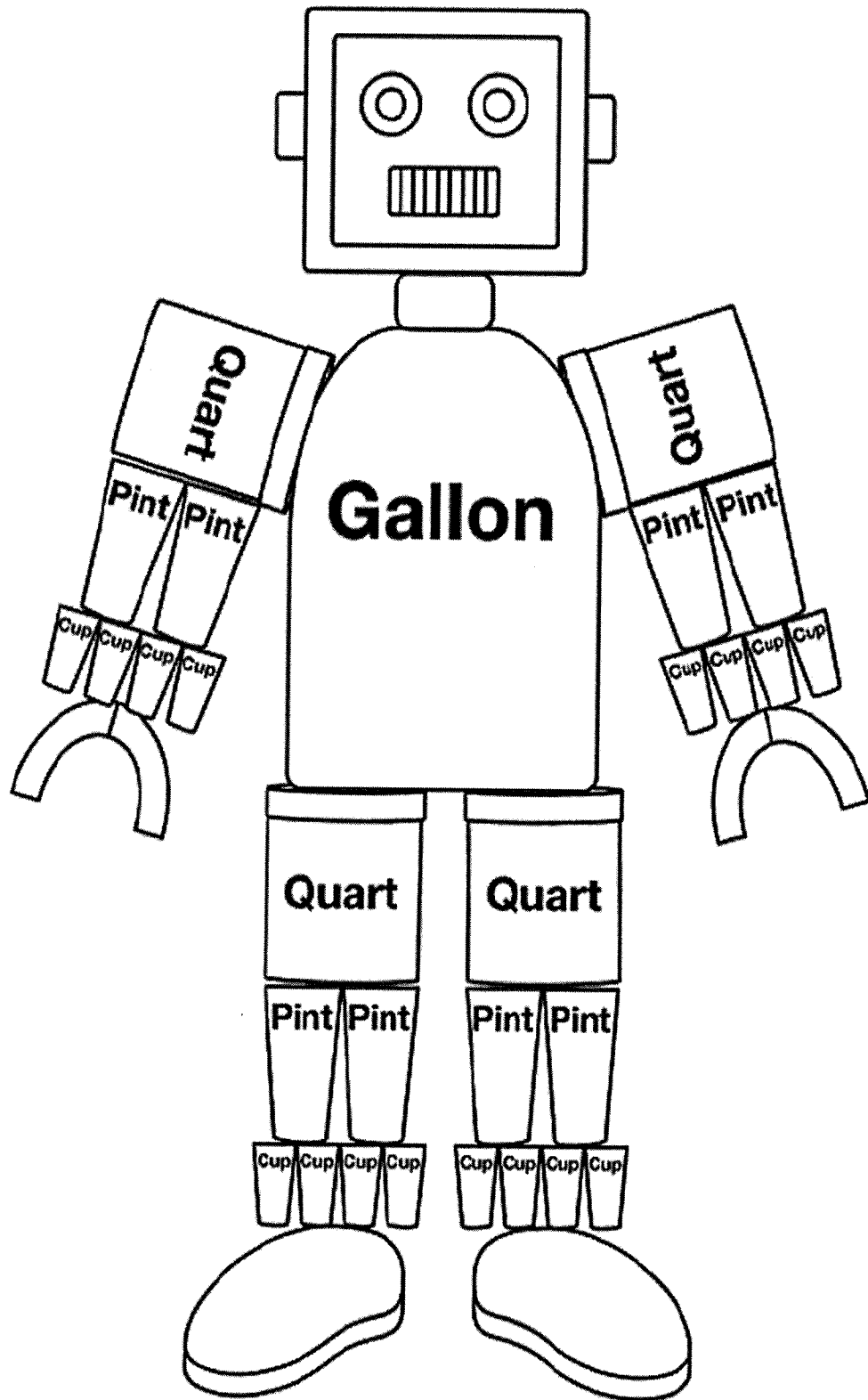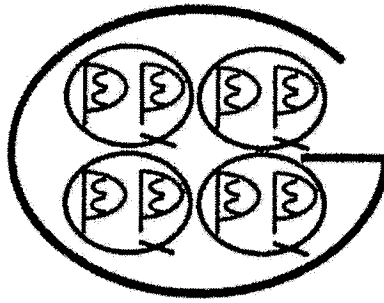
a. How many quarts are in a gallon? _____

b. How many pints are in a gallon? _____

c. How many cups are in a gallon? _____

d. Which is greater: a quart or a pint? _____

e. How many cups are in a pint? _____

f. Which is less: a cup or a pint? _____

g. How many cups are in a quart? _____

h. How many pints are in 2 quarts? _____

i. How many cups are in 3 pints? _____

j. Which is greater: 8 cups or 1 quart? _____

k. Which is less: 4 quarts or one gallon? _____

MILK

I QUART

HORIZON
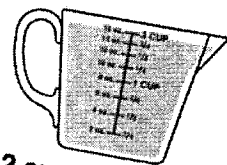
2 cups = 1 pint

27

Circle the appropriate unit of metric weight/mass.

1. A teaspoon of sugar

   grams   kilograms

2. A minivan

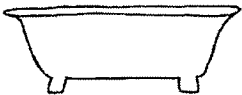   grams   kilograms

3. A pencil

   grams   kilograms

4. A real horse

   grams   kilograms

Circle the appropriate unit of metric liquid volume

1. The water used for a bath

   liters   milliliters

2. The water in an ice cube
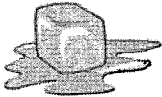
   liters   milliliters

3. Mustard for a hot dog
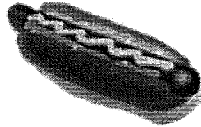
   liters   millilters

4. The water in a pool

   liters   milliliters

Circle the appropriate unit of metric length.

1. The hands on a clock

   centimeters   meters

2. Trip on an airplane

   meters   kilometers

4. How far you can throw a ball

   millimeters   meters

5. Width of a string

   millimeters   meters

Let's try multiplication again.

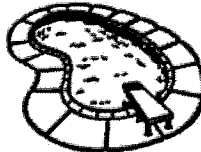## Goal: Solve all the problems correctly in under 2 minutes.

Directions: Have someone time you on the challenge below. Practice your multiplication flashcards and try the challenge again as you work through this packet.
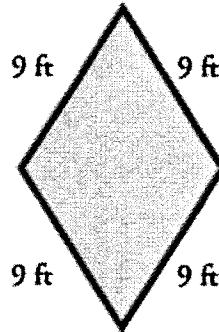
9x9=____	8x8=____	7x1=____	6x1=____	9x4=____
4x4=____	9x8=____	8x7=____	9x3=____	7x2=____
6x2=____	7x3=____	9x7=____	8x6=____	5x5=____
7x4=____	9x2=____	6x3=____	9x6=____	8x5=____
9x1=____	5x4=____	6x4=____	7x5=____	9x5=____
8x4=____	4x3=____	7x6=____	6x5=____	5x3=____
4x2=____	8x3=____	5x2=____	4x1=____	6x6=____
7x7=____	5x1=____	8x2=____	3x3=____	8x1=____

How many problems did you solve correctly in 2 minutes? _____

Find the perimeter (distance around) for each shape.

4 cm
6 cm
5 cm

9 ft   9 ft
9 ft   9 ft

5 in.
7 in.   7 in.
8 in.   8 in.

_____   _____   _____
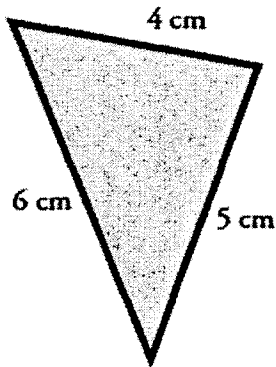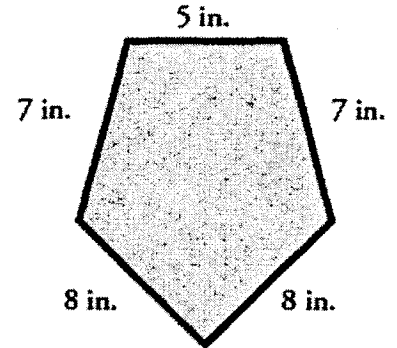
Find the area for each shape.

1.

Area = _____square cm

2.

5ft

7ft

Area = _____ square ft

3.

9 cm

square

Area = _____square cm

4.

7m

4m

1m

2m
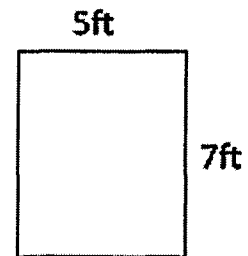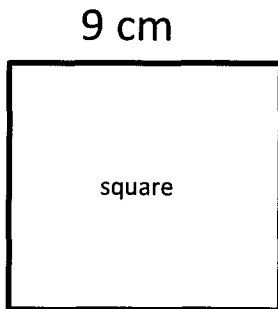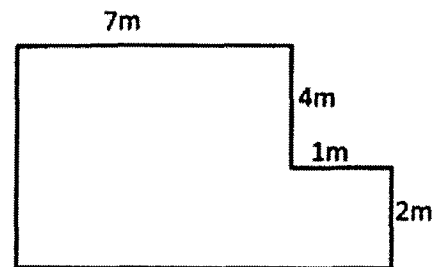
Area = _____ square m (m²)

*Hint: Break the figure apart into 2 rectangles.

30

Write the names of the shapes in the boxes were they belong.

parallelogram rectangle square rhombus trapezoid

4 sides
_____
_____
_____
_____
_____

only 1 pair of parallel sides
_____

all sides equal length
_____
_____

opposite sides equal length
_____
_____
_____
_____

4 right angles
_____
_____

31
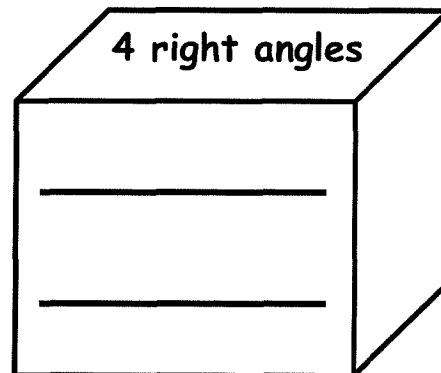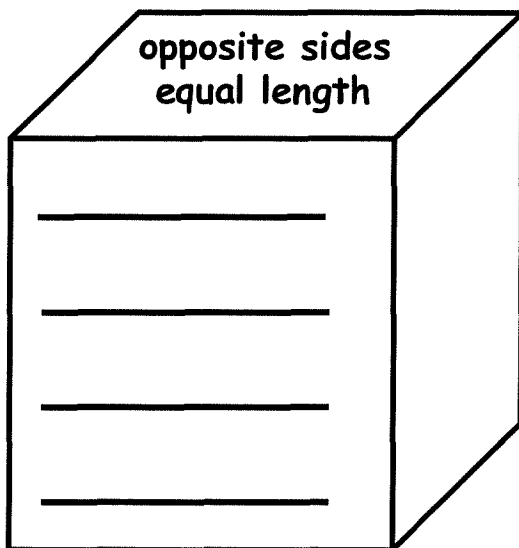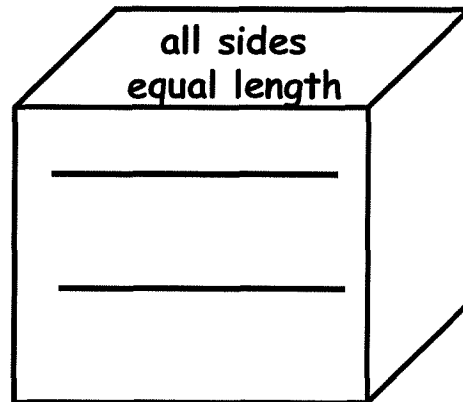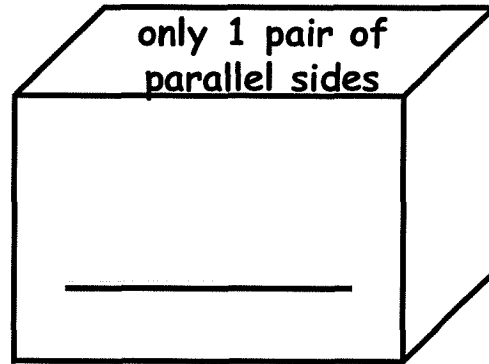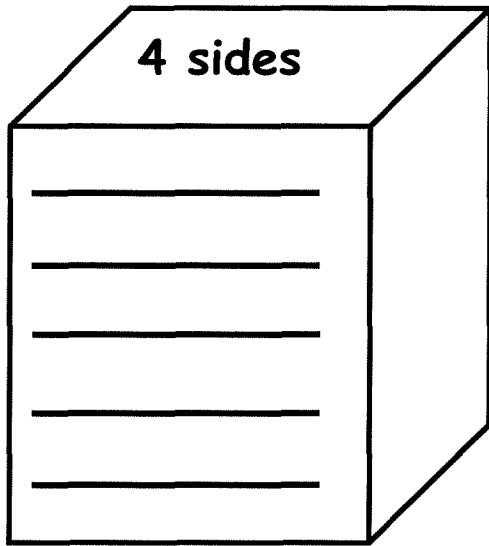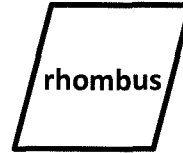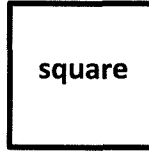
Compare the numbers. Use < or >.
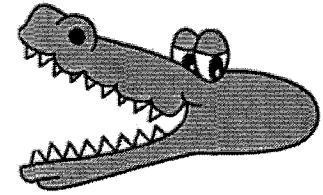
3,852 ☐ 1,705   2,527 ☐ 1,595

9,801 ☐ 5,224   1,552 ☐ 1,196

7,396 ☐ 3,575   6,109 ☐ 5,710

4,921 ☐ 5,825   4,118 ☐ 6,121

8,244 ☐ 4,710   5,403 ☐ 3,091

Identify the rule and complete the pattern.

1. 7, 15, 23, _____, _____   Rule:_____

2. 48, 44, 40, _____, _____   Rule:_____

3. 7, 14, 21, _____, _____   Rule:_____

4. 2, 6, 18, 54   Rule:_____

5. 21, 18, 15, _____   Rule:_____

Really Silly Word Problems

1. There are strange insects on Planet Zoog. Strange, but fast! The Pizbot can fly 145 miles an hour. The Waztail fly can fly 258 miles an hour. <u>About how far</u> can both insects travel in one hour?

ANSWER:

---

2. Chef Crayzee was making his infamous pie á la bug. His special recipe called for 41 black ants, 52 beetles, 27 red ants and 16 flies to make one batch. How many bugs does he need in all?

ANSWER:

---

3. The Martian exploratory force has 65 crew members. On the way to Earth they took a rest stop on the moon. 17 Martians stayed too long in the restroom and missed the rocket to Earth. How many Martians are on the rocket?
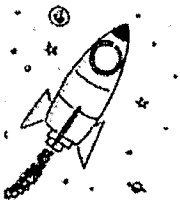
ANSWER:

---

4. Doodlewazzers have 3 eyes on each of their 4 heads. How many eyes does a Doodlewazzer have?

ANSWER:

Math Brain Teasers

GOING IN CIRCLES?

Fill in the circles with the numbers from 2 to 6 so that each side of the triangle adds up to 10.
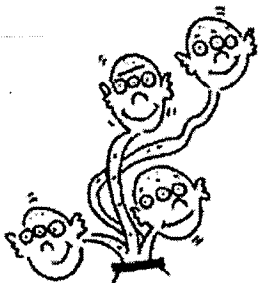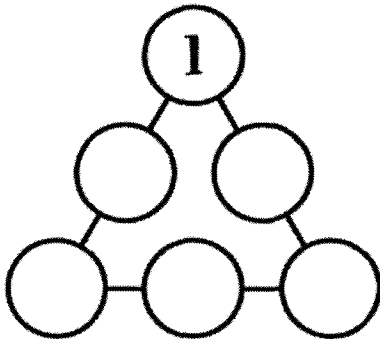

WHAT'S YOUR SIGN?

Fill in the missing + and − signs to make this equation true:

$$5 \bigcirc 4 \bigcirc 9 \bigcirc 3 \bigcirc 2 \bigcirc 1 = 4$$

GIVE ME HALF

What is $\frac{1}{2}$ of $\frac{1}{2}$?
(Hint: Draw a picture!)

"TRI" THIS

How many triangles are in this figure?

SHAPE TRACE

Can you trace this figure without going over any lines?

More Math Brain Teasers
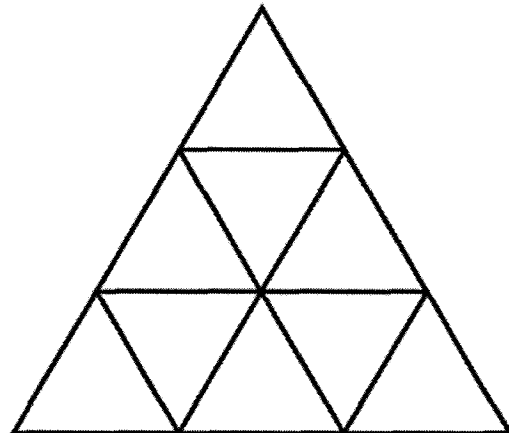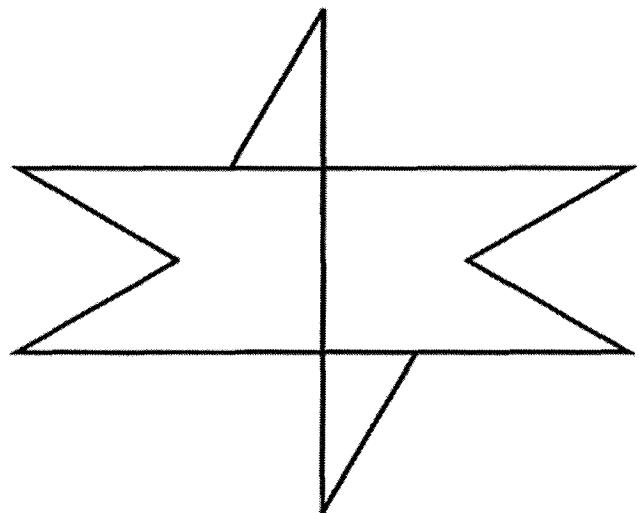
UPSIDE DOWN

What two-digit number reads the same upside down as it does right side up?

_____

CATS IN LINE

One cat walked in front of two cats. One cat walked behind two cats. One cat walked between two cats. How many cats were there? (Hint: Draw a picture!)

_____

CUTTING THE CAKE!

What is the fewest number of cuts you could make in order to cut a cake into six slices? (Hint: Draw a picture!)

_____

NUMBER PATTERN

Here are the first five figures in a pattern. Draw the next figure.

HOW MANY NUMBERS

Use the digits 5, 7, and 3. Write all the three-digit numbers you can make.

_____

_____

_____

_____

_____

Answers are on the last page.

Last Time: Did you master multiplication through 10 x 10?
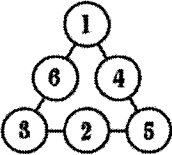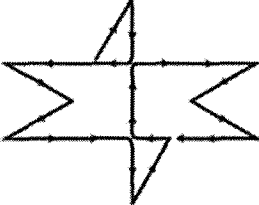
Goal: Solve <u>all</u> the problems in under 2 minutes.

Directions: Have someone time you on the challenge below.

9x9=____	8x8=____	7x1=____	6x1=____	9x4=____
4x4=____	9x8=____	8x7=____	9x3=____	7x2=____
6x2=____	7x3=____	9x7=____	8x6=____	5x5=____
7x4=____	9x2=____	6x3=____	9x6=____	8x5=____
9x1=____	5x4=____	6x4=____	7x5=____	9x5=____
8x4=____	4x3=____	7x6=____	6x5=____	5x3=____
4x2=____	8x3=____	5x2=____	4x1=____	6x6=____
7x7=____	5x1=____	8x2=____	3x3=____	8x1=____

How many problems did you solve correctly in 2 minutes? _____

Answers to Brain Teasers

Going in Circles	
What's your sign?	$5 + 4 - 9 + 3 + 2 - 1 = 4$
Give Me Half	$\frac{1}{2}$ of $\frac{1}{2}$ is $\frac{1}{4}$.
Tri Time	13 triangles: 9 small (interior) 3 medium (interior) 1 large (the entire triangle)
Shape Trace	
Upside Down	Answers include 11, 88, 69, and 96.
Cats in a Line	3 cats
Cutting the Cake	three cuts
Number Pattern	
How many numbers	573; 735; 357; 375; 753; 537

Congratulations!!

You have <u>completed</u> your summer packet and are better prepared for 4th grade math!