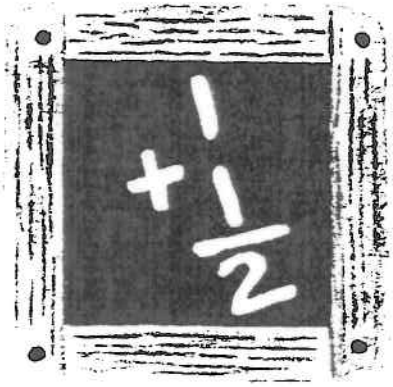
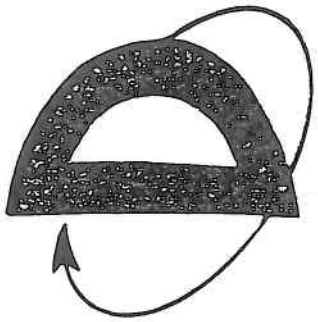
NAME: _____

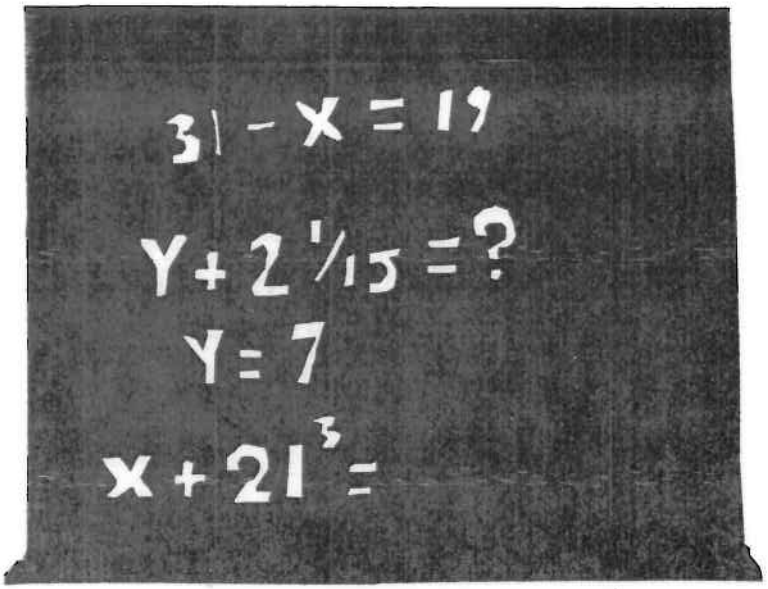
Super Understanding of Mathematics Magnifies Everything Reviewed in school





Fourth Grade

Garrett Park E.S.



Summer Math Calendar

Going into Fifth Grade

Directions: Follow the daily activities to practice different math concepts. Feel free to extend any of the activities listed. When the work is completed, have a parent initial the box showing that you completed that activity. Give the calendar to your teacher on the first day of school.

Monday	Tuesday	Wednesday	Thursday	Friday
Using a restaurant menu or newspaper advertisement, choose an appetizer, salad and main dish. Find the total of your meal.	Find a chart or graph in the newspaper. Find the range of the numbers for the information that was graphed.	Gather 5 chapter books. Determine how many pages are in each book. Find the mean, median, and mode of these numbers.	Figure your age in months. Figure out how many days old you are. Don't forget leap years!	Figure out how many days old you are. Don't forget leap years!
Gather three store receipts. Find the total amount that was spent not counting the tax.	Make five triangles using ten toothpicks.	Survey five people to find their favorite outdoor activity. Graph the results.	List at least 24 different combinations of coins that equal $1.00. (There are 294 ways!)	Use a magazine to find three pictures that have at least one line of symmetry.
Calculate the average age of the people that live in your house. How would the average change if your grandmother lived with you and she was 90 years old?	Measure the length and width of your bedroom. Multiply to find the area. Be sure to label your answer with the correct unit of measurement.	Gather 5 different size boxes. Measure their height and width in inches and centimeters. Order the heights from smallest to largest. Do the same for the widths.	Using a deck of cards, take two cards at a time and multiply the numbers. (Let a Jack = 11, a Queen = 10, a King = 0, and an Ace = 1.) Write the multiplication equation for each pair of cards. Repeat this until all the cards have been used	Do jumping jacks for one minute and count how many you were able to do. Do sit ups for 15 seconds and count how many you were able to do. Divide the number of jumping jacks you did by the number of sit ups you did.
Find four numbers that are larger than 1,000 in a newspaper. Put them in order from least to greatest and then order them from greatest to least.	Use outdoor chalk to draw a hexagon, pentagon, and octagon on the driveway or sidewalk . Now see if you can find a line of symmetry for each.	Using an eyedropper, drop water onto different size coins. Count the number of drops you can put on each coin before water begins to spill off. Graph your results using a bar graph.	Empty out a small bag of different colored candy. Express the amount of each color of candy as a fraction. (Hint: the number of pieces of candy of each color to the total number of candies.)	Write down the names and prices of five cars you find in the newspaper. Order the prices from least to greatest. Round the price of each car to the nearest thousand.

MATH ACTIVITIES YOU CAN DO AT HOME

The bold words at the beginning of each activity indicate the focus or skilled covered.

1. **ESTIMATE:** Children practice estimation in real life situations and explain how they came to that conclusion.

For Example:

- Have your child estimate the cost of a few items when you go to the supermarket.
- Have your child estimate how long (miles) and/or the time it will take to get to a certain destination when traveling.
- Estimate how much the bill might be at a restaurant.
- Estimate how much it will cost to fill the car with gasoline.

2. **PERFORMING A TASK:**

For Example:

- Cook with your children. Ask them to read the recipe, measure out the out the ingredients and follow all the instructions. Ask them to restate the procedure in their own words. * As a challenge have them calculate the portions of each ingredient for doubling or tripling a recipe.
- Play board games with your children. Have them read the directions and explain how to play the game.
- Talk to your child about the sequence of events of their day. They should be able to explain events using detail and support any conclusions about what has happened. Can they use vocabulary specific to the topic when speaking?

3. **DECISION-MAKING, MAKING CHANGE, EXPLAINING THINKING:** Children must make decisions, this is an opportunity for your child to explain their thinking - why they chose that strategy or solution.

For Example:

- While playing games involving money, have your children be the "banker" and use addition and subtraction strategies for giving change.
- Pay a cashier the proper amount of money that is owed or count change from a purchase.
- Ask your child to budget the cost for your family for an activity based on the fare or fee for one person.

4. **INTREPRETING DATA:** Have your child scan the newspaper for charts, tables, and graphs. Ask your child to interpret these data displays and identify the important elements of them. Ask questions related to the charts, tables, and graphs.

5. **TIME** – Students should tell time using a clock with hands. Review with them certain times of the day – getting up, meals, going to bed. Also, refer to morning and evening times (A.M. and P.M.). Also, refer to the days of the week and the months of the year, using a calendar.

Other activities:

- Determine the amount of time taken to complete certain activities over the course of several days, a week, or a month.
- When planning a family activity, ask your child how much time will be needed to do an activity – what time will it start and finish.
- Ask about the amount of time for cooking/baking foods.
- Calculate how many days, hours, minutes, and even seconds old a person is.

6. **CONNECTIONS TO REAL LIFE EXPERIENCES:** Applying math concepts in real life experiences. This will make math more meaningful to your child if they see how the skills and concepts they have learned in class can be applied outside the classroom.

For Example:

- Use of fractions – in cooking, find them in the newspaper
- Measurement – use a measuring tape or rule to measure different objects around your home.
- Identify examples of different shapes in your home and your surroundings – circle, square, rectangle, triangle, sphere, cylinder, cube, etc.
- Identify examples of horizontal, vertical, parallel, intersecting, and perpendicular lines (example – telephone wires and streets)
- Figure out the tax to add on the purchase of items or food.

7. PROBLEM SOLVE: Managing multi-step problems. Is your answer correct and thorough? Is your child using math vocabulary to solve the problems? Can they answer questions that begin "How to…? "When do you…? What operation do you use and why?

8. BASIC MATH FACTS AND COMPUTATION SKILLS: Practice math facts with your child. They can make flash cards and practice just a few minutes a day.

9. WEBSITES TO EXPLORE: see back of calendar for websites

http://www.allmath.com/
This site has flash cards and links to other sites for games, math humor, worksheets, math help and more.

http://www.aplusmath.com
This site has basic facts flash cards and a game room, worksheets, multiplication table practice and more.

http://www.mathfactcafe.com
This site has a pencil next to pre-made cards so kids can do the facts and have the computer check them. Kids can print them out and also put in their own numbers and make their own worksheets.

http://www.funbrain.com
This site has easier to harder addition and subtraction computation and problem solving. It also has language and grammar skills activities

http://www.dositey.com/
This site is a lot of fun and is good for 2 digit addition with and without regrouping

http://www.24game.com
This site has math games using basic operations

http://www.coolmath4kids.com
This site has a wide range of topics and will give you step-by-step instructions.

http://www.abc.net.au/countusin/games
Each game is designed to help kids understand basic concepts in math. This site has a variety of math games i.e. volume, length, halves, chance, numbers, time, sorting, subtraction, and addition. It is better for students of the primary grades.

http://www.learningplanet.com
This site has games by grade level but with advertisement and a subscription. There are some free games.

http://www.gamequarium.com
This site has math activities for K-6.

http://www.SETGame.com
This is a card game to build students' visual thinking and pattern skills in math. Commercial, but does have some great free puzzles.

http://www.math.com
Good resource of how to do problems

http://www.mathcats.com
This is an interactive fun site

http://www.spikesgamezone.com
Lots of math games

http://www.funschool.com
This site has games, but also commercial advertising

http://www.figurethis.org
This site gives you ideas for fun hands-on math activities. Good for upper grades

http://www.kidsites.com
List of sites for math as well as other subjects.

http://timezattack.com
FREE home version for practicing multiplication facts (also new versions for division, addition, and subtraction!)

http://abcya.com
Loads of math games for K-5 as well as games for reading and language arts

Name: _____ Place Value Up to Hundred Thousands

Find the Mystery Numbers

The mystery number has...

a 4 in the ten thousands place.

a 5 in the hundred thousands place

a 3 in the tens place

a 2 in the ones place

a 0 in the hundreds place

a 6 in the thousands place

What is the mystery number? _____

The mystery number has...

a 1 in the ones place

a 7 in the hundred thousands place

a 7 in the tens place

an 8 in the ten thousands place

a 9 in the thousands place

a 2 in the hundreds place

What is the mystery number? _____

The mystery number has...

a 9 in the ten thousands place

a 0 in the thousands place

an 8 in the hundred thousands place

a 0 in the ones place

an 8 in the hundreds place

a 2 in the tens place

What is the mystery number? _____

Name _____ Date _____ #____

Numbers to Base 10 Formative

1.

Millions	Hundred Thousand	Ten Thousand	Thousand	Hundreds	Tens	Ones
2	21	0	46	5	12	3

What number am I in standard form?_____

2. Write the number in standard form.

93 tens = _____ 34 hundreds = _____ 25 thousands = _____

3. Make a new number using the digits 2, 4, 9, 7, 6, 3, 1

What is your number in standard form? _____

What is your number in expanded form? _____

_____

What is your number in word form? _____

_____

Why is it possible to use the digits 0-9 to write any number?

_____

_____

_____

_____

_____

_____

Compare the numbers 105,421 and 150,421. You may use < (less than), > (greater than) or = in your explanation.

_____

_____

_____

_____

4. Round each number to the underlined digit.

6,7<u>1</u>4=_____ 86,<u>9</u>96=_____

40<u>1</u>,96<u>1</u>=_____ 7<u>7</u>9,948=_____

5. Sally and her best friend, Elizabeth, were saving up to buy a business. Sally saved up $12,584 and Elizabeth saved up $23,459. They think they saved up ABOUT (estimate) $45,000. Is that a reasonable estimate?

_____

_____

_____

_____

5. Solve the equations.

203,687+4,999	268,403+ ? = 725,865	90,531+192+489,687
572,312-40,867	340,047-258,062	20,006-19,998

Name: _____

Rounding

a. What is 33 rounded to the nearest ten? a. _____

b. What is 850 rounded to the nearest hundred? b. _____

c. What is 429 rounded to the nearest ten? c. _____

d. What is 923 rounded to the nearest hundred? d. _____

e. What is 248 rounded to the nearest ten? e. _____

f. What is 160 rounded to the nearest hundred? f. _____

g. What is 57 rounded to the nearest ten? g. _____

h. What is 47 rounded to the nearest hundred? h. _____

i. What is 52 rounded to the nearest hundred? i. _____

j. What is 845 rounded to the nearest ten? j. _____

k. What is 953 rounded to the nearest hundred? k. _____

l. What is 2,345 rounded to the nearest ten? l. _____

m. What is 1,468 rounded to the nearest hundred? m. _____

n. What is 6,789 ronded to the nearest ten? n. _____

o. What is 9,032 rounded to the nearest hundred? o. _____

p. What is 5,565 rounded to the nearest ten? p. _____

q. What is 888 rounded to the nearest hundred? q. _____

r. What is 8,699 rounded to the nearest ten? r. _____

s. What is 9,990 rounded to the nearest hundred? s. _____

t. What is 3,419 rounded to the nearest ten? t. _____

Compose and Compare

Compose numbers from the values in the tables. Write the numbers in standard form.
Write a number sentence comparing the numbers.

A.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	8	0	10	2	3

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
8	18	0	8	1	9

B.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
0	24	14	8	0	75

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	5	3	17	17	8

C.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1	0	0	325	9	7

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
0	13	0	25	0	9

D.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
8	0	198	8	0	148

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	0	99	0	95	0

Compose and Compare

Compose numbers from the values in the tables. Write the numbers in standard form.
Write a number sentence comparing the numbers.

E.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
0	0	354	15	0	16

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	5	5	0	51	6

F.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
0	24	14	8	0	75

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	5	3	17	17	8

G.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	14	46	0	90	0

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	10	45	9	0	1

H.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	0	16	6	5	0

<, >, =

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	0	0	167	95	0

Name _____

Flying High

	Atlanta	Boston	Chicago	Dallas	Denver
Boston	946				
Chicago	606	867			
Dallas	721	1,555	796		
Denver	1,208	1,767	901	654	
Detroit	505	632	235	982	1,135

Use the air distance chart above to write a number sentence for each problem. Then solve.

1. How many more miles does it take to get from Denver to Atlanta than to get from Detroit to Atlanta and Chicago to Atlanta combined?

2. Jorge flew from Dallas to Detroit, from Detroit to Denver, and from Denver back to Dallas. How many miles did Jorge fly altogether?

3. Maria flew from her home city of Boston to Atlanta, back home to Boston, and then back to Atlanta. How many miles did she fly altogether?

4. How many more miles is it to fly round-trip between Dallas and Boston than between Denver and Chicago?

Name _____ Date _____

Use drawings or equations to represent how you solved each problem.

1. Nick brings 24 plates to the party.

   He brings 3 times as many plates as Morgan.

   How many plates does Morgan bring to the party?

2. Sara brings 18 bowls to the party.

   Mark brought some more bowls to the party.

   Now there are 32 bowls.

   How many bowls does Mark bring to the party?

3. Susan brings 9 cups to the party.

   Jeff brings 4 times as many cups as Susan.

   How many cups did Jeff bring to the party?

4. Ellen brings 45 napkins to the party, and Terry brings 6 napkins.

How many times as many napkins does Ellen bring as Terry?

5. Kim brings some goody bags to the party.

Clark brings 18 goody bags to the party.

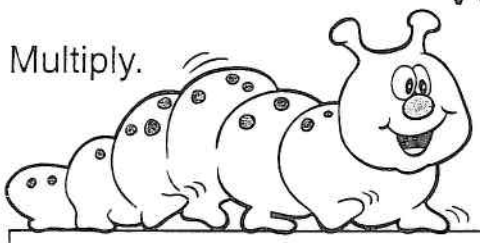
Now there are 32 goody bags

How many goody bags does Kim bring to the party?

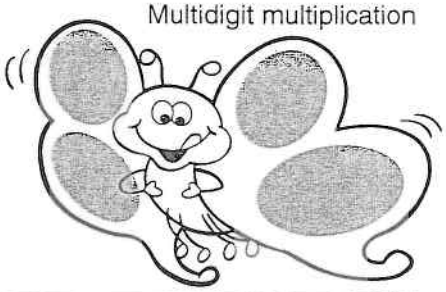
Name _____ Date _____

Multidigit multiplication

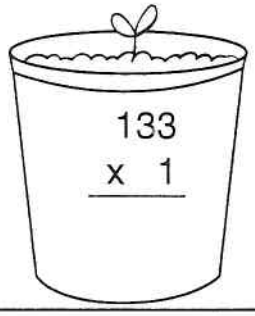
Watch Them Grow!



Multiply.



A.



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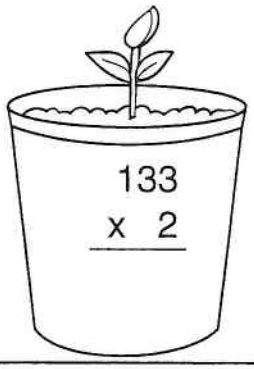

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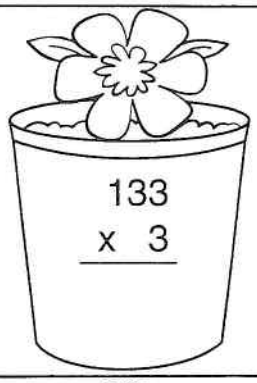

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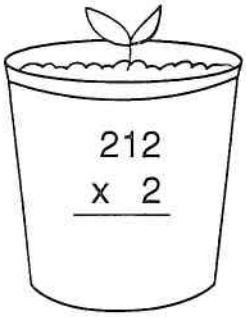

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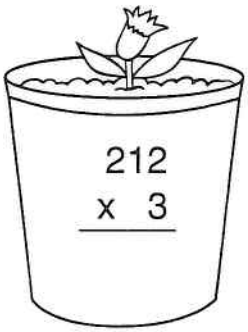

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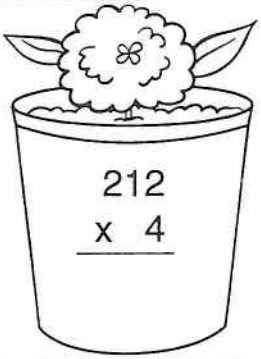

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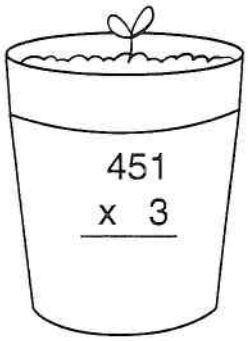

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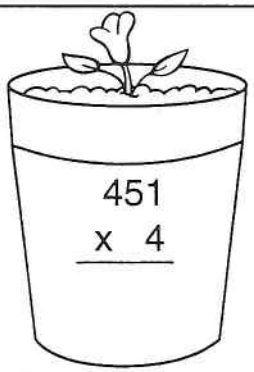
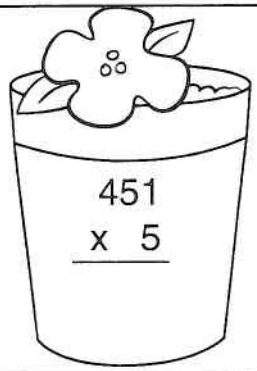
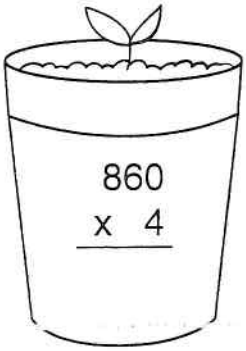


I.



J.



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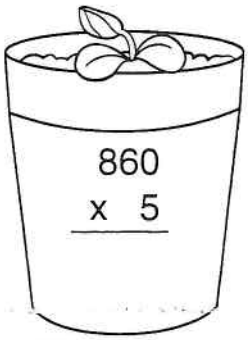
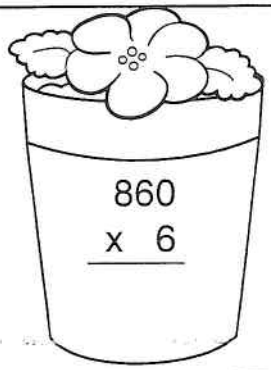


L.



Bonus Box: Describe any patterns you see in the problems above.

Name _____

Using Mental Math to Divide

Divide. Use strategies based on place value.

1. $250 \div 5 =$ _____
2. $1{,}400 \div 2 =$ _____
3. $300 \div 5 =$ _____
4. $1{,}600 \div 4 =$ _____
5. $240 \div 8 =$ _____
6. $3{,}600 \div 4 =$ _____
7. $1{,}600 \div 2 =$ _____
8. $270 \div 3 =$ _____
9. $4{,}200 \div 7 =$ _____
10. $640 \div 8 =$ _____
11. $2{,}000 \div 5 =$ _____
12. $320 \div 8 =$ _____
13. $1{,}200 \div 2 =$ _____
14. $1{,}600 \div 8 =$ _____

The fourth grade performed a play based on the story of Cinderella. There was one chair for each person present.

15. On Friday, 140 people came to the play. The chairs in the auditorium were arranged in 7 equal rows. How many chairs were in each row? _____

16. There were 8 equal rows set up for Saturday's performance. There were 240 people at the play on Saturday. How many chairs were in each row? _____

17. Which is the quotient of $5{,}600 \div 8$?

A 40 **B** 400 **C** 70 **D** 700

18. **Writing to Explain** Explain why the following answer is not correct: $1{,}000 \div 5 = \underline{2{,}000}$.

_____

_____

_____

Name _____ Date _____

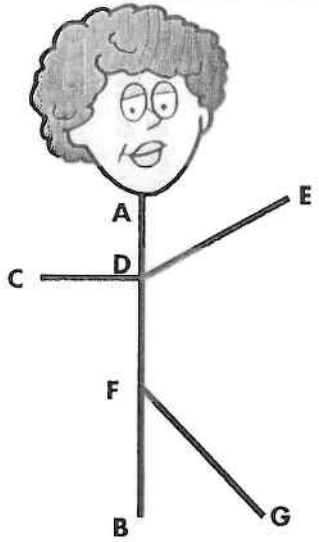
Acrobatic Angles

The Geo Gymnastic Competition is well under way! Gymnasts are judged on three body angles: *acute, right,* and *obtuse*. Look at each gymnast. Study each angle indicated. Name the correct angle in the space provided.

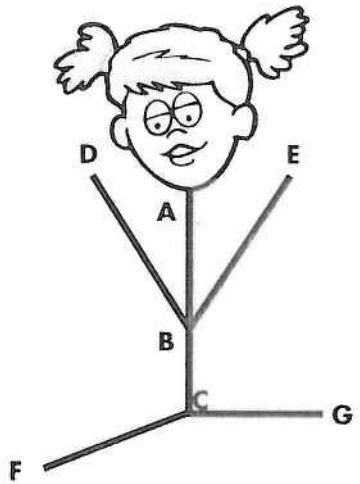
An *acute* angle measures less than 90°.

A *right* angle measures exactly 90°.

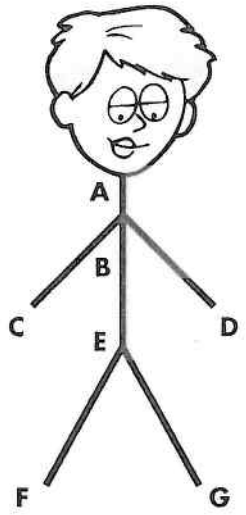
An *obtuse* angle measures more than 90° and less than 180°.



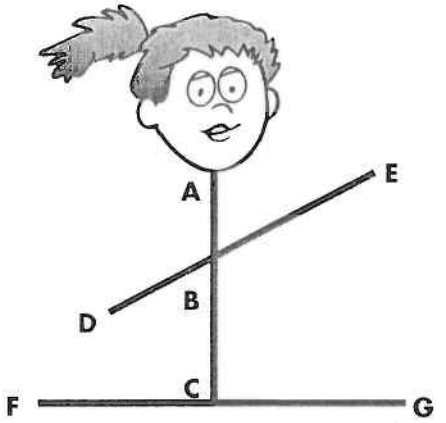
1. <ADE _____
2. <ADC _____
3. <BFG _____
4. <EDB _____



5. <ABE _____
6. <FCG _____
7. <ACG _____
8. <DBE _____



9. <ABC _____
10. <FEG _____
11. <AEG _____
12. <CBD _____



13. <DBC _____
14. <EBC _____
15. <ACF _____
16. <ABE _____

Bonus Box: On the back of this sheet, sketch a stick figure gymnast like the ones above so that his or her body position shows an acute angle, a right angle, and an obtuse angle.

Name _____

LESSON 17.2

Line Relationships

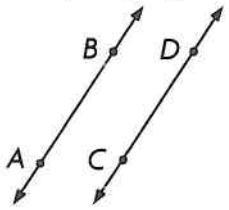
Vocabulary

Fill in the blanks.

1. _____ lines are lines that cross each other.

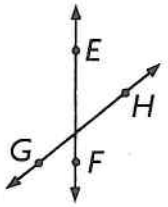
2. _____ lines intersect to form four right angles.

Name any line relationship you see in each figure. Write *intersecting*, *parallel*, or *perpendicular*.

3. 

_____

_____

4. 

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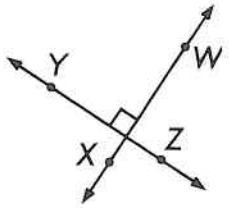
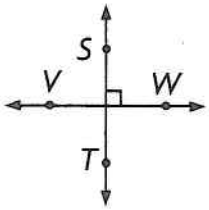
_____

5. 

_____

_____

6. 

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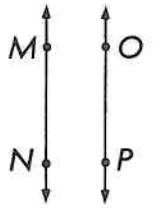
7. 

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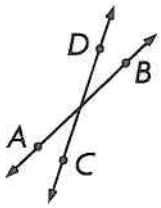
8. 

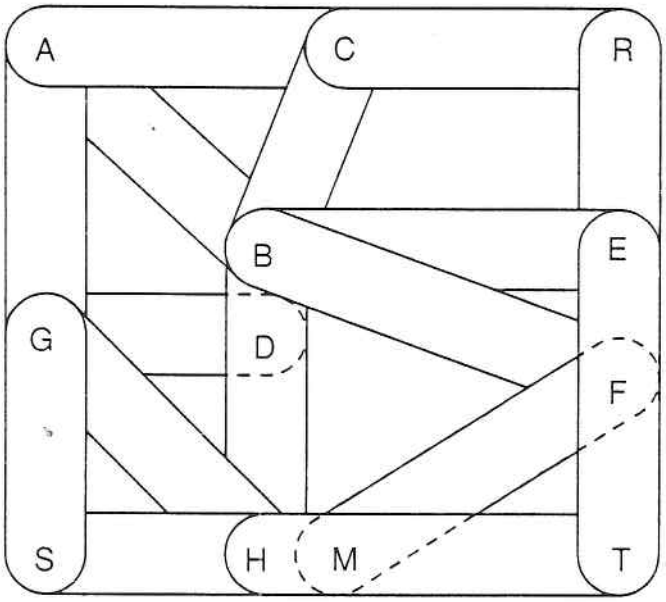
_____

_____

Name _____ Identifying and drawing angles

A Tangle of Angles

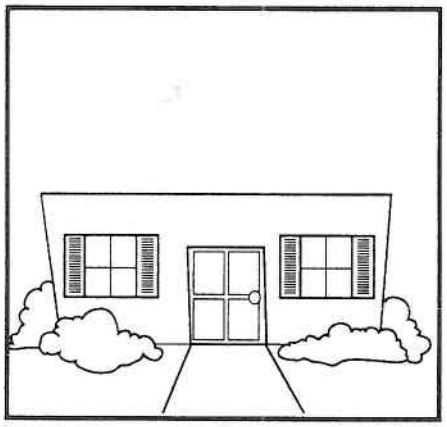
Write *acute*, *obtuse*, or *right* on the line to identify each angle.



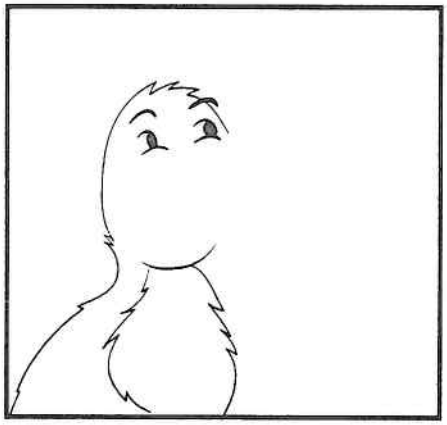
1. ∠ABC _____
2. ∠CBE _____
3. ∠CRE _____
4. ∠AGD _____
5. ∠EBF _____
6. ∠BFM _____
7. ∠ABE _____
8. ∠ABF _____
9. ∠GSH _____
10. ∠MFT _____

Complete each picture by drawing the requested angle.

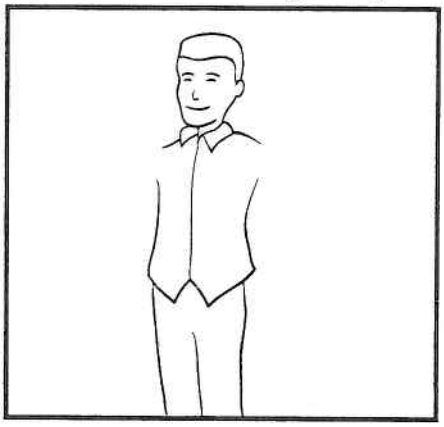
11. an obtuse roof



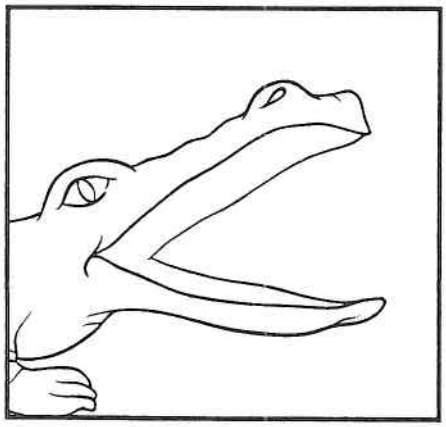
12. an acute beak



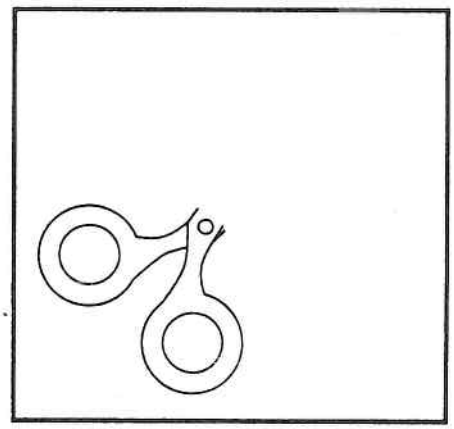
13. arms bent at right angles



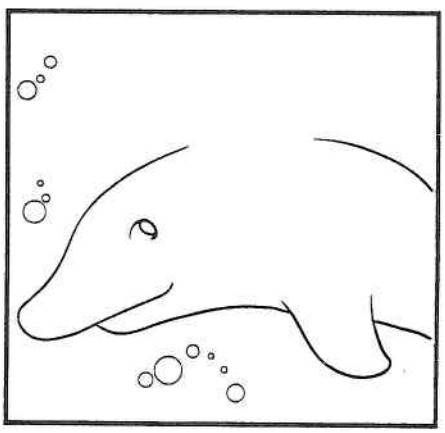
14. acute teeth



15. scissor blades opened to an obtuse angle



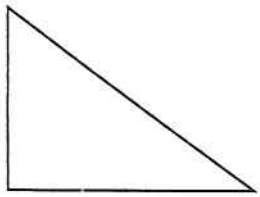
16. an acute back fin



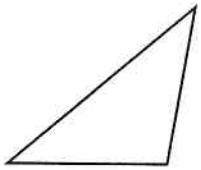
Name : _____ Score : _____

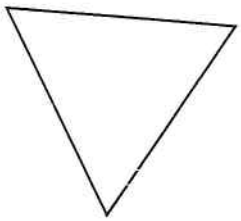
Identifying Triangles

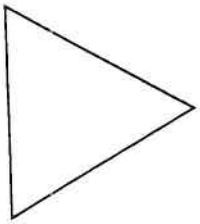
Identify each triangle based on sides. (Equilateral, Isosceles or Scalene)

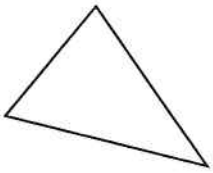
1) 

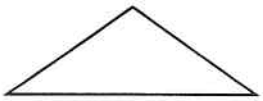
Scalene triangle

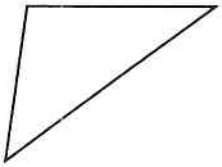
2) 

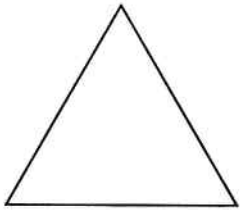
3) 

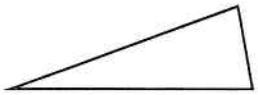
4) 

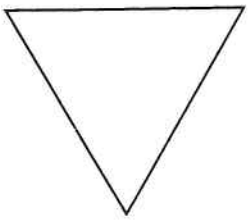
5) 

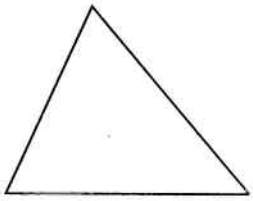
6) 

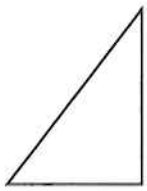
7) 

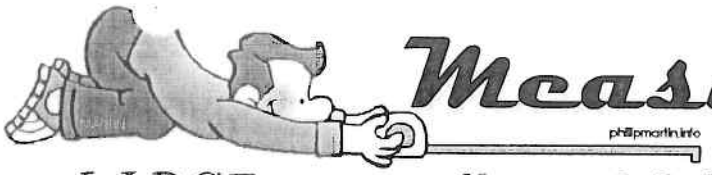
8) 

9) 

10) 

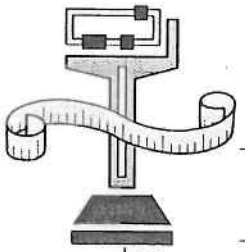
11) 

12) 



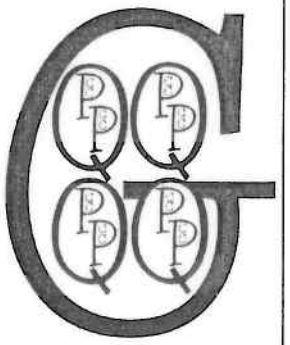
Measurement Conversions

LARGE ⇨ small ⇨ *Multiply*



small ⇨ LARGE ⇨ *Divide*

	Customary	Metric
Length	1 foot (ft) = 12 inches 1 yard (yd) =3 feet, 36 inches 1 mile (mi) =1760 yards, 5280 feet	Basic Unit: meter (m)
Capacity	1 cup (c) = 8 fluid ounces 1 pint (p) =2cups, 16 fl. oz. 1 quart (qt) =2 pints, 4 cups 1 gallon (gal) = 4 quarts, 8 pints, 16 cups	Basic Unit: liter (L)
Weight	1 pound (lb) = 16 ounces(oz) 1 ton (T) =2000 pounds	Basic Unit: gram (g)



kilo-	1000
hecto-	100
deka-	10
	1
deci-	0.1
centi-	0.01
milli-	0.001

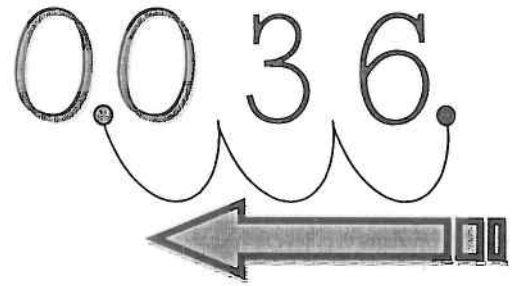
King	Henry	Died	By	Drinking	Chocolate	Milk
kilo-	hector-	deka-	BASE	deci-	centi-	milli-
1000_	100_	10_	_	0.1_	0.01_	0.001_

* Move your decimal the same number of spaces you "jump" on this line, in the same direction!

Example:

36 mm = _____ m

*Start at "milli-" (mm) & jump 3 spaces to the left to get to the base (m), now move the decimal in 36 3 spaces to the left. Fill in your spaces with zeroes!



So, 36 mm = _0.036_ m

Unit Conversions

Directions: Use the work space to figure out the unit conversions.

1. 6 feet = _____yards	2. 5 quarts = _____gallons
3. 1 quart = _____ fluid ounces	4. 1 gallon = _____pints
5. 4 yards = _____inches	6. 2 miles = _____feet

Your name: _____

Elapsed Time

Nearest Minute

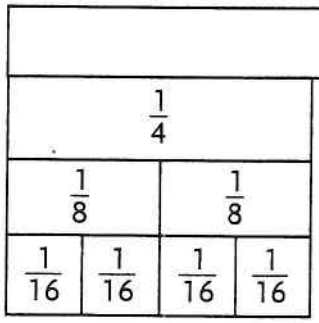
Complete the table by filling in the elapsed times.

Start Time	End Time	Elapsed Time
5:00 A.M.		3 hours and 57 minutes
8:00 P.M.	10:44 P.M.	
11:55 P.M.		23 minutes
1:35 P.M.		5 hours and 40 minutes
	4:16 A.M.	1 hour and 31 minutes
3:18 P.M.	7:09 P.M.	
	4:20 A.M.	2 hours
Noon	2:35 P.M.	
	8:10 P.M.	12 minutes

Name _____

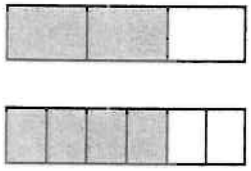
LESSON 19.2

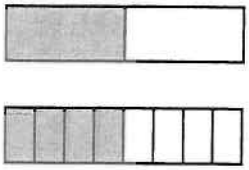
Equivalent Fractions

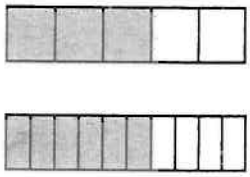


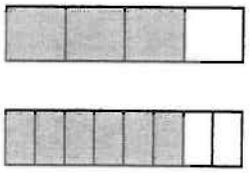
Fractions that name the same amount are called **equivalent fractions.** $\frac{1}{4}$, $\frac{2}{8}$, and $\frac{4}{16}$ are different names for the same number. So, $\frac{1}{4} = \frac{2}{8} = \frac{4}{16}$, which makes them equivalent fractions.

Find the equivalent fraction.

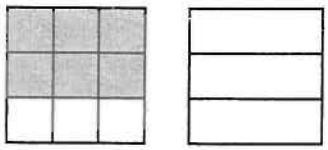
1.  $\frac{2}{3} = \frac{\square}{6}$

2.  $\frac{1}{2} = \frac{\square}{8}$

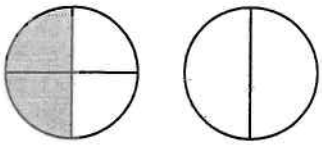
3.  $\frac{3}{5} = \frac{\square}{\square}$

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

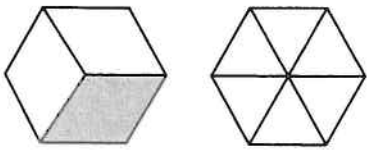
Color the correct number of parts to show an equivalent fraction. Then write the equivalent fraction.

5. 

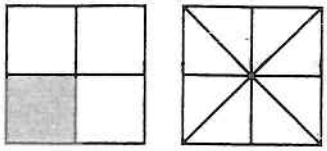
$\frac{6}{9} = \frac{\square}{\square}$

6. 

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

7. 

$\frac{1}{3} = \frac{\square}{\square}$

8. 

$\frac{1}{4} = \frac{\square}{\square}$

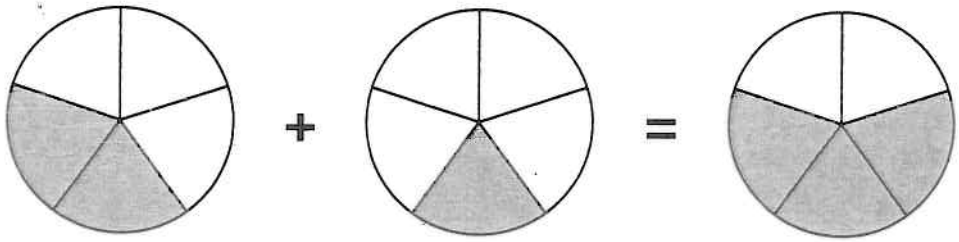
Name _____

LESSON 20.1

Add Like Fractions

When you add like fractions, add only the numerators.

$\frac{2}{5} + \frac{1}{5} =$?



$\frac{\text{2 parts shaded}}{\text{5 parts}} + \frac{\text{1 part shaded}}{\text{5 parts}} = \frac{\text{3 parts shaded}}{\text{5 parts}}$

$\frac{2}{5} + \frac{1}{5}$ → Add the numerators. → $\frac{2+1}{5}$ → $= \frac{3}{5}$

→ Write the denominator. →

Find the sum. Show how you added the numerators.

1. $\frac{2}{6} + \frac{3}{6} = \frac{2+3}{6} = \frac{5}{6}$

2. $\frac{3}{7} + \frac{3}{7} =$ _____

3. $\frac{1}{8} + \frac{4}{8} =$ _____

4. $\frac{2}{5} + \frac{2}{5} =$ _____

5. $\frac{2}{4} + \frac{1}{4} =$ _____

6. $\frac{1}{3} + \frac{1}{3} =$ _____

7. $\frac{4}{10} + \frac{5}{10} =$ _____

8. $\frac{4}{9} + \frac{1}{9} =$ _____

9. $\frac{4}{12} + \frac{6}{12} =$ _____

10. $\frac{2}{8} + \frac{1}{8} =$ _____

11. $\frac{3}{5} + \frac{2}{5} =$ _____

12. $\frac{5}{8} + \frac{6}{8} =$ _____

Model and use decimal and fraction notation to represent fractions of tenths and hundredths

Name: _____

Write a fraction and a decimal to describe each model.

$\frac{4}{10}$ _____ 0.4 _____

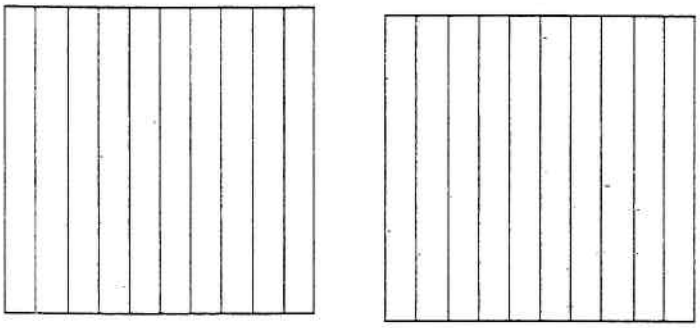
$\frac{40}{100}$ _____ 0.40 _____

_____ _____

_____ _____

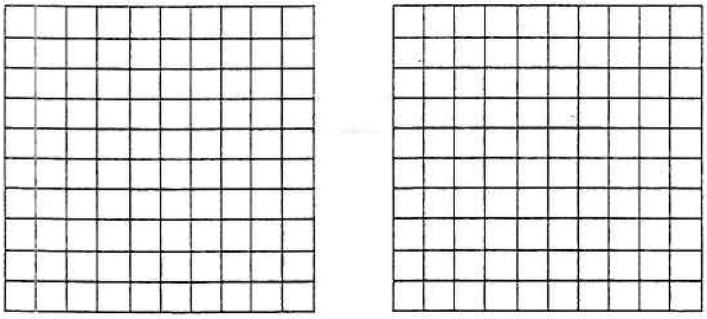
Shade the model to represent each fraction. Then write the fraction as a decimal.

$\frac{13}{10}$



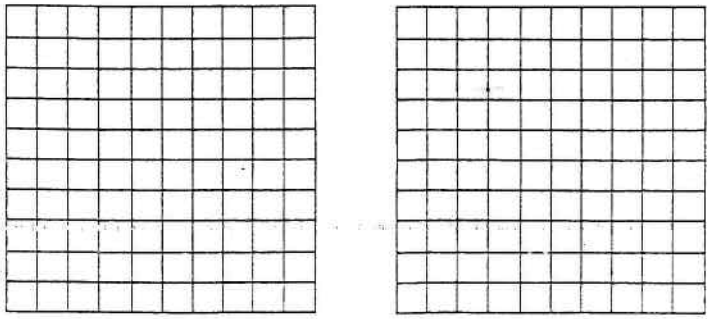
Decimal

$\frac{13}{100}$



Decimal

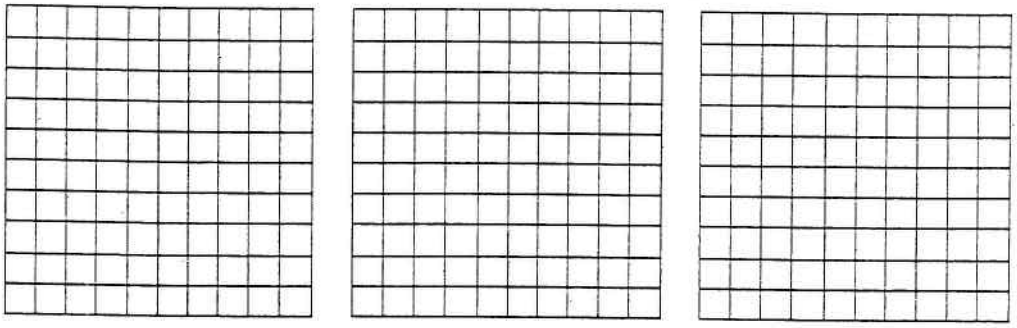
$1\frac{3}{100}$



Decimal

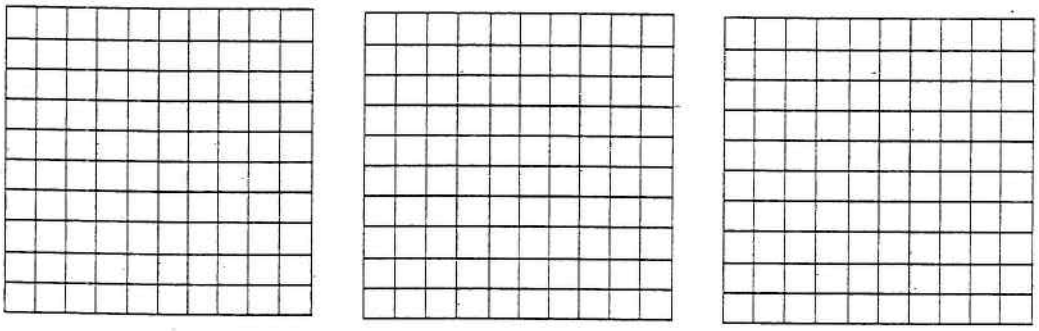
Shade the model to represent each decimal. Then write the decimal as a fraction.

2.06



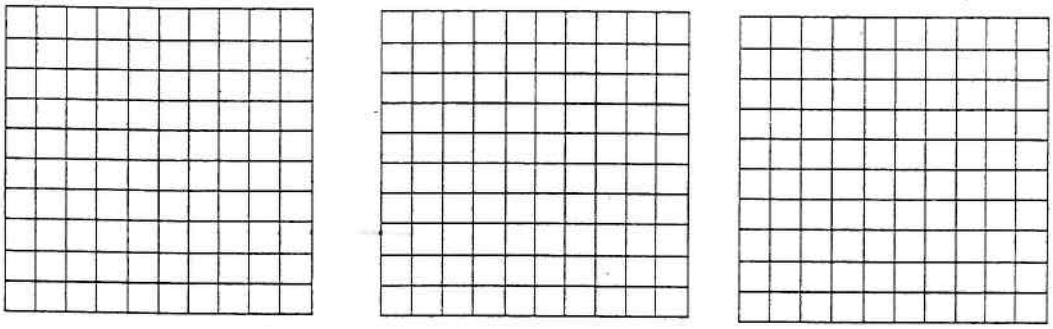
Fraction

0.26



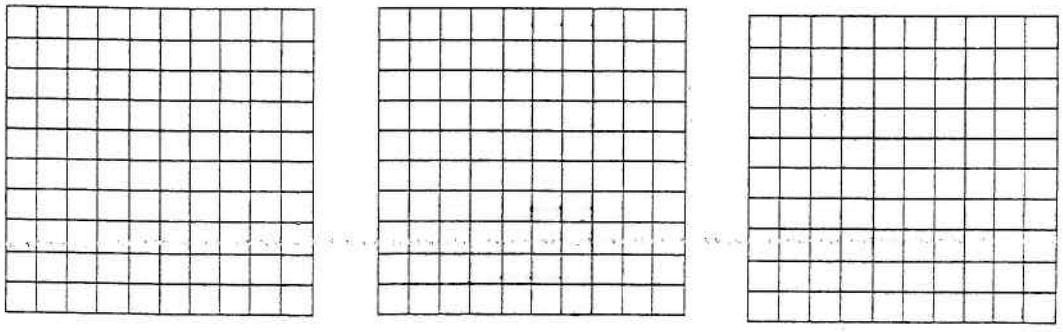
Fraction

2.60



Fraction

0.62

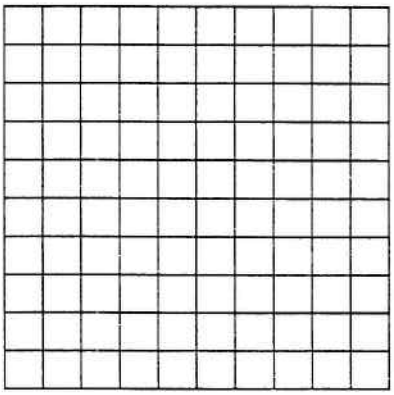


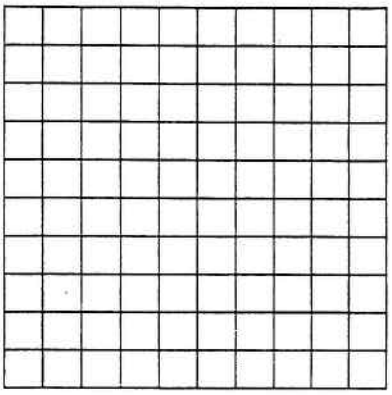
Fraction

Comparing with Decimal Squares *Name:* _____

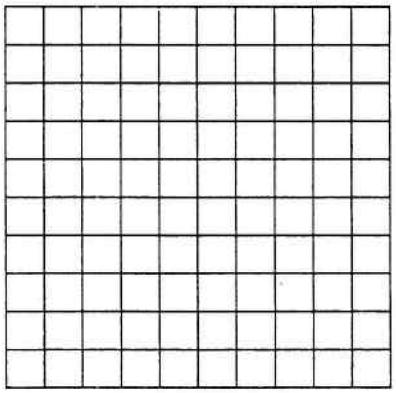
Compare two decimals using the symbols <, =, or >.
Use the decimal squares to justify your answer.

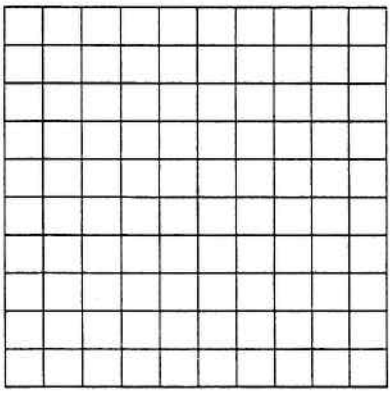
A. Which is more, 0.63 gallon or 0.8 gallon?



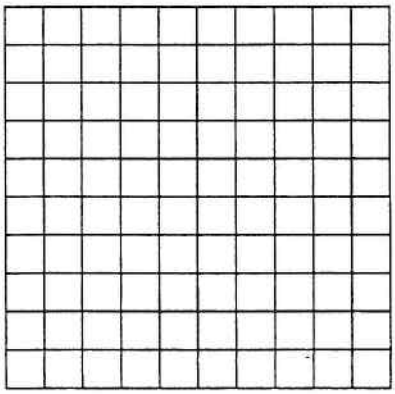


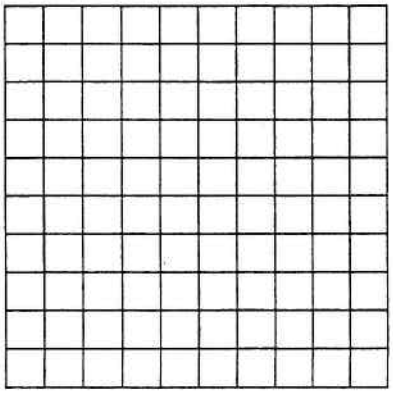
B. Which distance is shorter, 0.13 mile or 0.09 mile?





C. Which measure is greater, 0.89 kg or 0.9 kg?

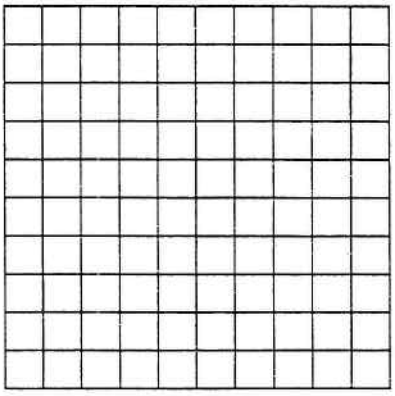


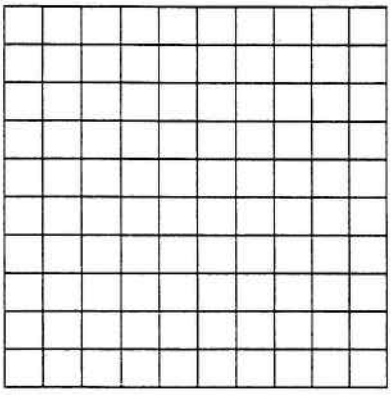


Comparing with Decimal Squares *Name:* _____

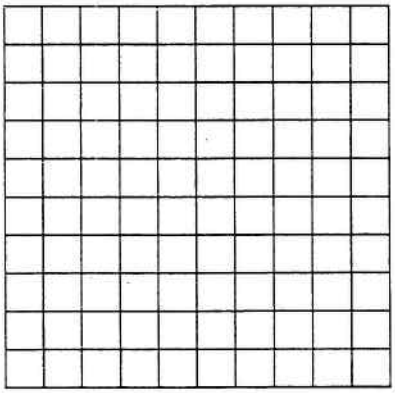
Compare two decimals using the symbols <, =, or >.
Use the decimal squares to justify your answer.

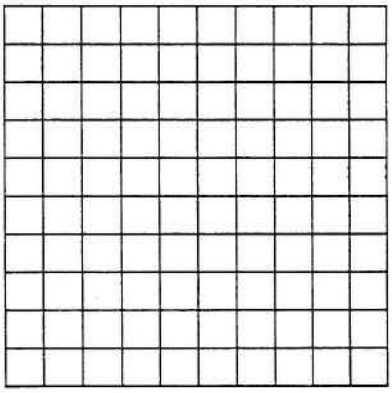
A. Which is more, 0.63 gallon or 0.8 gallon?



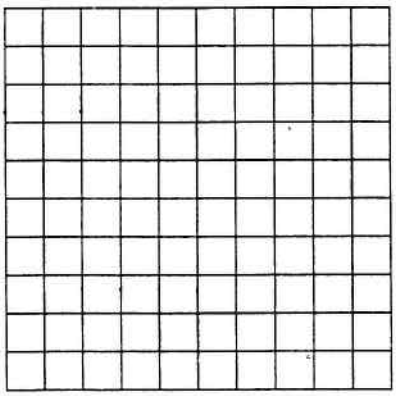


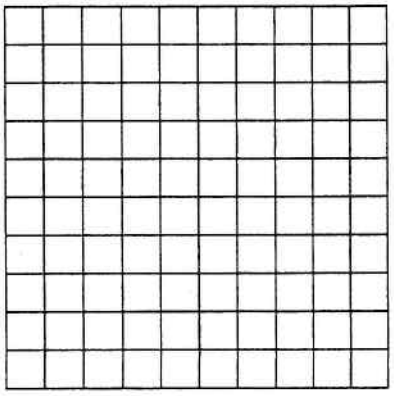
B. Which distance is shorter, 0.13 mile or 0.09 mile?





C. Which measure is greater, 0.89 kg or 0.9 kg?





Represent decimals (to hundredths) on a number line.

Name: _____

Date: _____

1. Place the two numbers to the right on the number line below. 42.5 42.35

Compare the two numbers on the line below using the symbols <, >, or =.

_____

Explain your thinking on the lines below.

_____

_____

2. Place two numbers on the number line that are greater than 42.0 and less than 43.0.

Compare the two numbers on the line below using the symbols <, >, or =.

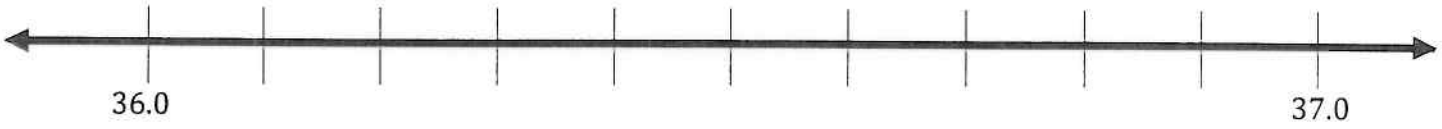
_____

Explain your thinking on the lines below.

_____

_____

3. Place the two numbers to the right on the number line below. 36. 4 36.75



Compare the two numbers on the line below using the symbols <, >, or =.

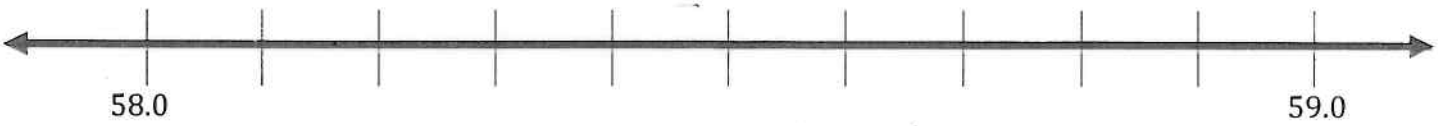
_____

Explain your thinking on the lines below.

_____

_____

4. Place two numbers on the number line that are greater than 58.0 and less than 59.0.



Compare the two numbers on the line below using the symbols <, >, or =.

_____

Explain your thinking on the lines below.

_____

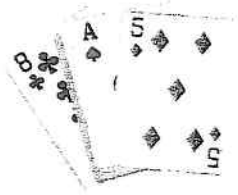
_____

Quick Stop: An Addition (or Multiplication) Card Game

Are you tired of worksheets and flashcards? This card game is a fun way to practice addition. Compete for the highest score as you flip over cards. Add up your cards until you reach 100 points. The first one there wins! Ready for a challenge? Check out the variations at the bottom of the page!

Skills:

- Addition
- Subtraction (see variations)



What You Need:

- Deck of cards
- Pencil and paper for every player (to add up scores)

What You Do:

1. Place a well shuffled deck of cards, face down, in the center of the playing area.
2. Each player begins by drawing one card and placing it face up in front of themselves. Players write the value of this card down at the top of their papers. (Aces are worth 1, and face cards are all 10.)
3. When all players are ready, everyone draws a second card. They add the value of these cards to their totals.
4. Keep playing until one player reaches 100.

Variations:

- Play until the deck runs out. The player closest to 100, without going over, wins.
- Add jokers into the deck. If a player draws a joker, their score drops back to zero.
- Start with 100 points, and subtract your way to the finish.
- Need a challenge? Use multiplication to reach 1000. (This is a good adaptation for a fourth grader!)

FACT POWER

Race to create an equation in the game will help your child and his opponents get creative with addition, subtraction, and multiplication. Math skills will be in full force while everyone tries to outsmart the competition!

What You Need:

- Deck of playing cards with face cards (jacks, queens, kings) removed
- Pencils
- Scratch paper
- 2 or more players

What You Do:

1. Remove the face cards from the deck and set them aside.
2. Shuffle the deck of cards and deal out 4 cards to each player. Make sure the cards are face down, so nobody can see the hand they were dealt with. No Peeking!
3. Place the remaining deck face down in the center of the table.
4. Have one of the players flip over the top card and place it face up on the table. This is the target number.
5. Announce that Aces equal 1.
6. Count to three and have all players turn their cards over at the same time.
7. Encourage players to add, subtract, multiply, or divide the numbers in any combination to try to reach the target number. Make sure that players use ALL four of their cards. Have players use the scratch paper to verify their math.
8. Whoever can create an equation that hits the target number first gets one point.
9. The player to reach 3 points first wins!
10. When 4 cards become too easy, try playing with 5 cards instead.

Helpful Tip: Tell players to keep rearranging the layout of the cards to see new equation possibilities.

Adapted from www.education.com

The Game of Pig (Grades 3–8)

Math concepts: This game for two or more players gives students practice with mental addition and experience with thinking strategically.

The object: to be the first to score 100 points or more.

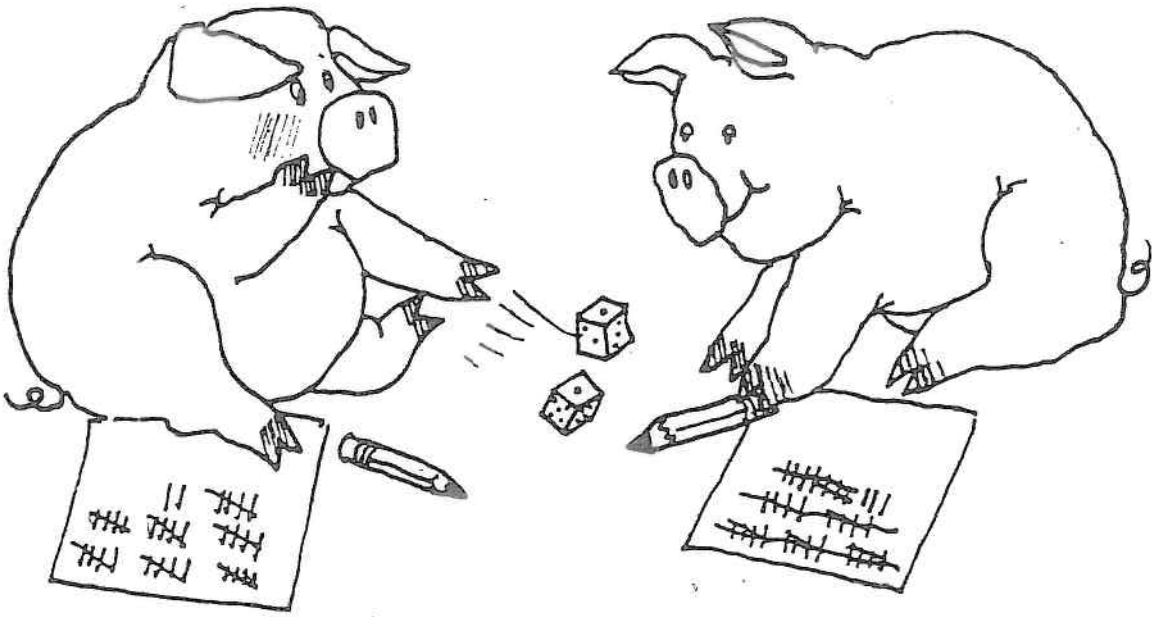
How to play: Players take turns rolling two dice and following these rules:

1. On a turn, a player may roll the dice as many times as he or she wants, mentally keeping a running total of the sums that come up. When the player stops rolling, he or she records the total and adds it to the scores from previous rounds.

2. But, if a 1 comes up on one of the dice before the player decides to stop rolling, the player scores 0 for that round and it's the next player's turn.

3. Even worse, if a 1 comes up on both dice, not only does the turn end, but the player's entire accumulated total returns to 0.

After students have had the chance to play the game for several days, have a class discussion about the strategies they used. You may want to list their ideas and have them test different strategies against each other to try and determine the best way to play.



http://www.scholastic.

Tables of Measures

Metric System

Prefixes

kilo (k)	=	1,000	
hecto (h)	=	100	
deka (da)	=	10	
deci (d)	=	0.1	= $\frac{1}{10}$
centi (c)	=	0.01	= $\frac{1}{100}$
milli (m)	=	0.001	= $\frac{1}{1,000}$

Length

1 kilometer (km)	=	1,000 meters (m)
1 hectometer (hm)	=	100 meters
1 dekameter (dam)	=	10 meters
1 decimeter (dm)	=	0.1 meter
1 centimeter (cm)	=	0.01 meter
1 millimeter (mm)	=	0.001 meter

Capacity

1 kiloliter (kL)	=	1,000 liters (L)
1 hectoliter (hL)	=	100 liters
1 dekaliter (daL)	=	10 liters
1 deciliter (dL)	=	0.1 liter
1 centiliter (cL)	=	0.01 liter
1 milliliter (mL)	=	0.001 liter

Mass

1 kilogram (kg)	=	1,000 grams (g)
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1 decigram (dg)	=	0.1 gram
1 centigram (cg)	=	0.01 gram
1 milligram (mg)	=	0.001 gram

Customary System

Length

1 foot (ft)	=	12 inches (in.)
1 yard (yd)	=	3 feet
1 yard	=	36 inches
1 mile (mi)	=	5,280 feet

Capacity

1 tablespoon (tbs)	=	3 teaspoons (tsp)
1 fluid ounce (fl oz)	=	2 tablespoons
1 cup (c)	=	8 fluid ounces
1 pint (pt)	=	2 cups
1 pint	=	16 fluid ounces
1 quart (qt)	=	2 pints
1 gallon (gal)	=	4 quarts

Weight

1 pound (lb)	=	16 ounces (oz)
1 ton (T)	=	2,000 pounds

Area

1 square foot (ft^2)	= 144 square inches ($in.^2$)
1 square yard (yd^2)	= 9 square feet
1 acre (A)	= 4,840 square yards
1 square mile (mi^2)	= 640 acres

Tables of Measures

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kilo- (k)	=	1,000
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Weight

1 pound (lb)	=	16 ounces (oz)
1 ton (T)	=	2,000 pounds

Area

1 square foot (ft²)	=	144 square inches (in²)
1 square yard (yd²)	=	9 square feet
1 acre (A)	=	4,840 sq yds
1 square mile (mi²)	=	640 acres

Other Measures

Time

1 minute (min)	=	60 seconds (s)
1 hour (h)	=	60 minutes
1 day (d)	=	24 hours
1 week (wk)	=	7 days
1 month (mo)	≈	4 weeks
1 year (yr)	=	12 months
1 year	=	52 weeks
1 year	=	365 days
1 leap year	=	366 days
1 decade	=	10 years
1 century	=	100 years

Counting

1 dozen (doz)	=	12 things
1 score	=	20 things
1 gross (gro)	=	12 dozen
1 gross	=	144 things

Glossary

A

acute angle An angle whose measure is less than 90°

acute triangle A triangle whose largest angle is an acute angle

addend A number to be added in an addition expression

adding 0 property Adding zero to any number does not change the number.
Examples: $7 + 0 = 7$ and $n + 0 = n$

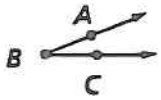
addition The arithmetic operation that combines two numbers

Example:
$$\begin{array}{r} 23 \leftarrow \text{addend} \\ +13 \leftarrow \text{addend} \\ \hline 36 \quad \text{sum} \end{array}$$

algebraic expression (see expression)

altitude (of a plane figure) A segment of a triangle or parallelogram that is perpendicular to the base. In a triangle one endpoint is the vertex opposite the base.

angle A geometric figure formed by two rays with a common endpoint. The angle below can be named either ∠ABC or ∠B.



angle *ABC* or ∠ *ABC*

area A measure of the number of square units in a region or a surface

associative property of addition (also called the grouping property of addition) Changing the grouping of the addends does not change the sum.
Example: $(37 + 95) + 5 = 37 + (95 + 5) = 137$

associative property of multiplication (also called the grouping property of multiplication) Changing the grouping of the factors does not change the product.
Example:
$(25 \times 5) \times 2 = 27 \times (5 \times 2) = 270$

average (or mean) A measure of central tendency. It is computed by adding all the items of data and dividing by the number of items.

axis (see *x-axis, y-axis*) A reference line on a graph

B

bar graph A pictorial representation of data that uses lengths of bars to show the information

base (of an exponent) The number that is used as a factor when evaluating powers
Example: $3^4 = 3 \times 3 \times 3 \times 3$
The base is 3.

base (of a geometric figure) A side or face in a plane or solid figure

billion The number 1,000 million or 1,000,000,000

C

capacity The maximum amount of liquid that a container can hold

Celsius temperature scale (°C) The temperature scale in the metric system in which the freezing temperature of water is 0°C and the boiling temperature of water is 100°C.

center (see *circle*)

centi- A prefix meaning one hundredth
Example: A centimeter is 0.01 meter.

central angle An angle whose vertex is the center of a circle

certain event An event that will always occur, such as "The sun will rise tomorrow morning." The probability of a certain event is 1.

chord A segment joining any two points on a circle

circle A plane figure that has all of its points the same distance from a given point called the center

circle graph A pictorial representation of data that uses sections of a circle to show the information

cluster Several items of data grouped into a small interval

common denominator A denominator used when adding two or more fractions with unlike denominators. Any common multiple of the given denominators can be used to write equivalent fractions.
Example: Some common denominators of $\frac{1}{2}$ and $\frac{1}{3}$ are 6, 12, 18, 24,...

common factor A number that is a factor of two or more whole numbers
Example: 1, 2, 3, and 6 are common factors of 12 and 18.

common multiple A number that is a multiple of two or more whole numbers
Example: Common multiples of 3 and 4 are 12, 24, 36,...

commutative property of addition (also called the order property of addition) Changing the order of the addends does not change the sum.
Example: $3 + 4 = 4 + 3 = 7$

commutative property of multiplication (also called the order property of multiplication) Changing the order of the factors does not change the product.
Example: $3 \times 5 = 5 \times 3 = 15$

compass A tool used to construct circles and other figures

compatible numbers Numbers used to make estimates. They are easy to work with mentally and are close to the given numbers.

composite number A number with three or more factors
Example: 9 is composite, because its factors are 1, 3, and 9.

Glossary

cone A space figure with one flat, circular surface and one curved surface

congruent figures Figures that have exactly the same size and shape. In congruent polygons, corresponding angles are congruent and corresponding sides are congruent.

coordinate Each number of an ordered pair
Example: (4, 6) has a first coordinate of 4 and a second coordinate of 6.

coordinate plane A grid with number lines used to locate points in a plane

counting number Any of the numbers 1, 2, 3, 4, and so on

cube A rectangular prism whose faces are all congruent squares

customary system of measurement The system of measurement currently used in the United States

cylinder A space figure with two congruent circular bases joined by a single curved surface

D

data Numerical information

deci- A prefix that means one tenth
Example: A decimeter is 0.1 meter.

decimal A number that uses place value to indicate parts of a whole. The decimal point separates the whole number digits from the digits representing parts of a whole.
Example: The decimal

3.67
↑
decimal point

represents the number three and 67 hundredths.

decimal point (see *decimal*)

degree A unit of measure of temperature or of an angle

denominator The numeral below the fraction bar in a fraction. It tells how many parts are in the whole.

diagonal A segment joining two vertices of a polygon that is not a side

diameter A chord of a circle that contains the center

difference The answer to a subtraction problem

digit Any of the symbols used to write numerals. In the base 10 system, they are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0.

distance The length of a path between two points

distributive property The same answer is obtained whether you add first and then multiply or multiply first and then add.
Example: $3 \times (20 + 7) = 3 \times 20 + 3 \times 7 = 81$

dividend The number that is divided

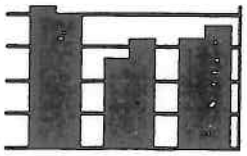
divisible A number is divisible by another number if there is no remainder when they are divided.
Example: 4, 16, and 640 are all divisible by 4.

division An operation that divides a set into equal sets.
Example:

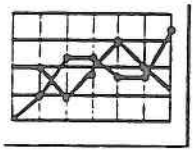
quotient ⟹ 10 R5 ⟸ remainder
divisor ⟹ 6)65 ⟸ divident

divisor The number that is divided by

double-bar graph A bar graph that compares two sets of data by using two bars for each category



double-line graph A line graph that compares two sets of data by using one line for each set



E

edge A line segment that is the intersection of two faces of a space figure

elapsed time A measure of the time that passes between the beginning and end of an event
Example: The elapsed time between 9:30 A.M. and 2:15 P.M. is 4 hours 45 minutes.

endpoint A point at the end of a line segment or ray

equally likely Outcomes of an experiment that have an equal chance of occurring
Example: A spinner is divided into 6 congruent sections. Each section is an equally likely outcome of a spin.

equation A number sentence that says that two expressions have the same value. It may be true, false, or open.
Example: $3 + 7 = 10$ is true; $3 + 7 = 7$ is false, and $3 + n = 10$ is open.

equilateral triangle A triangle with three congruent sides

equivalent fractions Two or more fractions that represent the same number.
Example: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$

estimate To find a approximate solution mentally by using numbers that are close to the original numbers and easy to work with mentally
Example: To estimate 47 + 32, add the rounded numbers 50 + 30. The estimated sum is about 80.

evaluate To find the value of an expression

even number A whole number that is divisible by 2

event Any outcome or set of outcomes of an experiment

expanded form A number written so that each digit is expressed as a power of 10 instead of by its position in the numeral
Example:

Expanded forms for 316:

$300 + 10 + 6$
$(3 \times 100) + (1 \times 10) + (6 \times 1)$

exponent A number that tells how many times a base is to be used as a factor.
Example: 3^4 represents the product $\{3 \times 3 \times 3 \times 3\}$
4 factors

exponent form A number expressed as a power
Example: Exponent forms of 64 are 2^6 and 8^2

expression A combination of numbers and symbols of operation (or grouping) that represents a mathematical quantity
Examples: $(7 + 3) \div 5$ or $6 \times n$

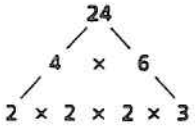
F

face A flat surface that is a side of a space figure

factor A number to be multiplied in a multiplication expression

factor (of a number) A counting number that exactly divides another number
Example: The numbers 1, 2, 3, 4, 6, and 12 are all factors of 12.

factor tree A diagram used to show the prime factors of a composite number



Fahrenheit temperature scale (°F) The temperature scale in the customary system in which the freezing temperature of water is 32°F and the boiling temperature of water is 212°F.

formula An equation that expresses a mathematical relationship
Example: A formula for area A of a rectangle with length l and width w is $A = l \times w$

fraction A number such as $\frac{1}{2}$ or $\frac{3}{4}$ that is used to express a part of a region or set

frequency The number of times an event occurs

function A set of ordered pairs

G

gap A characteristic of data. It is a significant interval that contains no data.

graph A pictorial representation of a data set or equation

greatest common factor (GCF) The greatest number that is a factor of each of two or more numbers.
Example: The greatest common factor of 24 and 30 is 6.

grouping symbol Parentheses or other symbols that indicate the grouping of numbers or terms in an expression

H

heptagon A polygon that has 7 sides

hexagon A polygon that has 6 sides

histogram A type of bar graph that shows frequencies over intervals

I

impossible event In probability, an event that cannot take place, such as "A prime number is also a composite number." The probability of an impossible event is 0.

inequality A number sentence that states that two numbers or expressions are greater than (>), less than (<), or not equal to (≠).
Examples: $3 + 6 < 10$ is read "Three plus six is less than 10."
$5 + 7 \neq 10$ is read "Five plus seven is not equal to 10."

integer The set of numbers containing all the whole numbers and their opposites

intersecting lines Line that cross each other or that have points in common

interval One of the equal sized divisions on a histogram or other graph scale

inverse operations An operation that undoes the results of another operation. For example, addition and subtraction are inverse operations, as are multiplication and division.

isosceles triangle A triangle with at least two congruent sides

J–K–L

key (of a pictograph) An indication of what a single symbol on the graph represents

kilo- A prefix meaning 1000.
Example: A kilogram is 1000 grams.

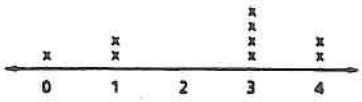
least common denominator (LCD) The least number that is a common denominator of two or more fractions. It is the least common multiple of the denominators of each of the fractions.
Example: The least common denominator of $\frac{1}{2}$ and $\frac{2}{3}$ is 6.

least common multiple (LCM) The least number that is a common multiple of two or more numbers
Example: 12 is the least common multiple of 3 and 4.

line A set of points that extends endlessly in two opposite directions

line graph A pictorial representation of data that shows changes over time using line segments

line plot A pictorial representation of a small set of data along a number line. Each data item is represented with an "X" placed above a number on the line



line segment A part of a line that has two endpoints

M

mass The amount of matter in an object. Some units of mass are milligram, gram, and kilogram.

mean The average of a set of data. It is found by adding each item of data and dividing by the number of items.
Example: 4 is the mean of 2, 4, 5, and 5.

median The middle point of the data when they are arranged from least to greatest. If there is an odd number of data items, it is the middle number. If there is an even number of data items, it is the mean of the two middle numbers.
Example: 4.5 is the median of 2, 4, 5, 5.

metric system of measurement An international system of measurement that uses the meter, liter, gram, and degrees Celsius as the basic units of measure

milli- A prefix meaning one thousandth
Example: A milliliter is 0.001 liter

mixed decimal A decimal, such as $0.83\frac{1}{3}$, that ends with a fraction

mixed number A number, such as $2\frac{2}{3}$ that is made up of a fraction less than one and a whole number

mode The number (or numbers) that occurs most often in a set of data. If every number occurs only once, the data has no mode.
Example: 5 is the mode of 2, 4, 5, 5.

multiple of a number The product of the number and any whole number.
Example: The multiples of 4 are 0, 4, 8, 12, 16, . . .

multiplication An operation that expresses repeated addition of the same number
Example: 12 ⟸ factor
× 4 ⟸ factor
48 ⟸ product

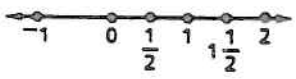
multiplying by 1 property Multiplying any number by 1 is equal to that number.
Example: $0.3 \times 1 = 0.3$

multiplying by 0 property Multiplying any number by 0 is equal to 0.
Example: $\frac{1}{4} \times 0 = 0$

N

negative integer A number such as −1, −2, −3, and so on that is less than 0

number line A line that has its points labeled with numbers (called coordinates) such as whole numbers, integers, fractions, and so on



number pattern An ordered set of numbers that seems to have a rule or pattern for finding the next number
Example: 1, 4, 7, 10, . . .is a number pattern whose rule is "add 3" to find the next number

numeral A name or symbol for a number

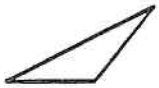
numerator The number over the bar in a fraction. It tells how many parts of the whole are under discussion.

numerical expression An expression that contains only numbers, symbols of operation, and grouping symbols
Example: $(7 + 4) \times 6$

O

obtuse angle An angle whose measure is greater than 90° and less than 180°

obtuse triangle A triangle whose largest angle is obtuse



octagon A polygon that has 8 sides

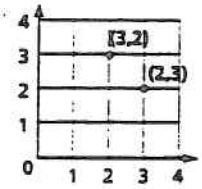
odd number A whole number that is not divisible by 2

open equation An equation that contains a variable

opposites Two numbers whose sum is 0. They are also called additive inverses.
Examples: 2 and −2 are opposites.

order of operations The rules that define the order in which the operations in an expression are to be evaluated. They are:
1 First work within parentheses
2 Next evaluate powers
3 Multiply and divide from left to right
4 Finally, add and subtract from left to right

ordered pair A pair of numbers used to locate a point in a coordinate plane. The first number is the horizontal distance from the origin; the second number is the vertical distance.



origin The point on a coordinate grid at which the two axes meet. Its coordinates are (0, 0).

outcome A result in a probability experiment

outlier An item of data that is significantly greater or less than all the other items of data

P

parallel lines Two lines in the same plane that do not intersect

parallelogram A quadrilateral that has its opposite sides parallel and congruent

pentagon A polygon with 5 sides

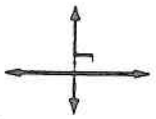
percent A ratio that compares a number to 100
Example: 39% is $\frac{39}{100}$.

percentage The result obtained by multiplying a quantity by a percent

perimeter The distance around a polygon. It is found by adding the lengths of all the sides.

period Each group of three digits seen in a number written in standard form
Example: In the number 306,789,245, the millions period is 306, the thousands period is 789, and 245 is the ones period.

perpendicular lines Two lines that intersect to form right angles



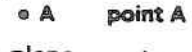
pictograph A pictorial representation of data that uses a single symbol or to represent multiples of a quantity

place-value system A system of numeration in which the value of a digit depends on its position in the numeral

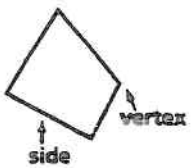
plane A smooth flat surface that extends infinitely in all directions on the surface

plane figure A figure whose points are all in the same plane

point A location in space. It is represented by a dot.



polygon A plane figure composed of line segments that meet only at their endpoints. The segments must form a closed figure.



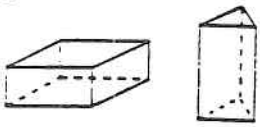
positive integer A counting number such as 1, 2, 3, ... that is greater than 0

power A number that can be expressed using a single base and exponent.
Example: 32 is a power of 2; it is the fifth power of 2.

prime factorization Expressing a number as a product of prime numbers
Example: $36 = 2 \times 2 \times 3 \times 3$ or $2^2 \times 3^2$

prime number A whole number greater than 1 that has exactly two factors, itself and 1
Example: $2 = 2 \times 1$

prism A space figure that has two congruent, parallel bases that are joined by parallelograms. A prism is named by the shape of its bases.

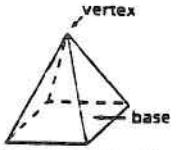


probability A number between 0 and 1 used to describe how likely an event is to happen; a measure of chance

product The answer to a multplication problem

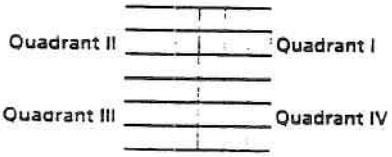
protractor A tool used to measure and draw angles

pyramid A space figure whose base is a polygon and whose other faces are triangles that share a common vertex. A pyramid is named by the shape of its base.



Q

quadrant One of the four sections of a coordinate plane formed by the axes. They are numbered counterclockwise starting from the upper right quadrant.



quadrilateral A polygon that has four sides

quotient The answer in a division problem

R

radius A segment from any point on a circle to its center; also the length of this segment

range The difference between the least and greatest numbers in a set of data
Example: The range of the data 2, 4, 5, 5 is $5 - 2 = 3$.

rate A ratio in which unlike quantities are being compared, such as words per minute or feet per second

ratio A comparison of two quantities using division
Example: 3 : 4, 3 to 4, or $\frac{3}{4}$

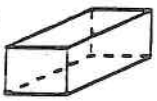
ray A part of a line that has one endpoint. When naming it, the endpoint is used first.

ray AB, or $\overrightarrow{AB}$

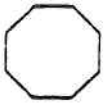
reciprocals Two numbers whose product is 1. They are also called multiplicative inverses.
Examples: 2 and $\frac{1}{2}$ $1\frac{3}{4}$ and $\frac{4}{7}$

rectangle A parallelogram that has four right angles

rectangular prism A space figure all of whose faces are rectangles



regular polygon A polygon that has all sides congruent and all angles congruent

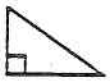


remainder The number that is left over in a division problem

rhombus A parallelogram that has all of its sides congruent

right angle An angle whose measure is 90°

right triangle A triangle whose largest angle is a right angle



rounding a number Replacing an exact number by another number that is easier to use or compute with
Examples: 12,501 rounded to the nearest hundred is 12,500.
4.386 rounded to the nearest hundredth is 4.39.

S

scale drawing A picture or diagram that is exactly the same shape as another but of a different size. Each distance in the drawing is in the same ratio as the corresponding distance in the original.

scale factor The ratio in a scale drawing or other similar figures that compares the scale drawing dimensions to the actual dimensions

segment (see *line segment*)

scalene triangle A triangle that has no congruent sides

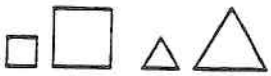
semicircle Half of a circle

sequence Numbers arranged according to some pattern or rule

side of an angle One of the rays that make up an angle

side of a polygon One of the line segments that make up a polygon

similar figures Two figures that have the same shape but not necessarily the same size. In similar polygons, corresponding angles are congruent and corresponding sides are proportional.



simplest form A fraction less than 1 in which the numerator and denominator have no common factors except 1, or a mixed number in which the fractional part is in simplest form
Examples:
$\frac{5}{10} = \frac{1}{2}$ $2\frac{6}{9} = 2\frac{2}{3}$ $\frac{12}{4} = 3$

solve an equation To find the value of the variable (called the solution) that makes an open equation true

space The set of all points

space figure A figure that is not entirely in one plane

sphere A space figure that has all of its points the same distance from a point, called the center.

square A rectangle that has all its sides congruent

standard form A number that is expressed as a base 10 numeral
Example: 3,126 is the standard form of the number three thousand, one hundred twenty-six.

stem-and-leaf plot A way to arrange data by place value. The front digit or digits are called stems, the last digit or digits are called leaves.