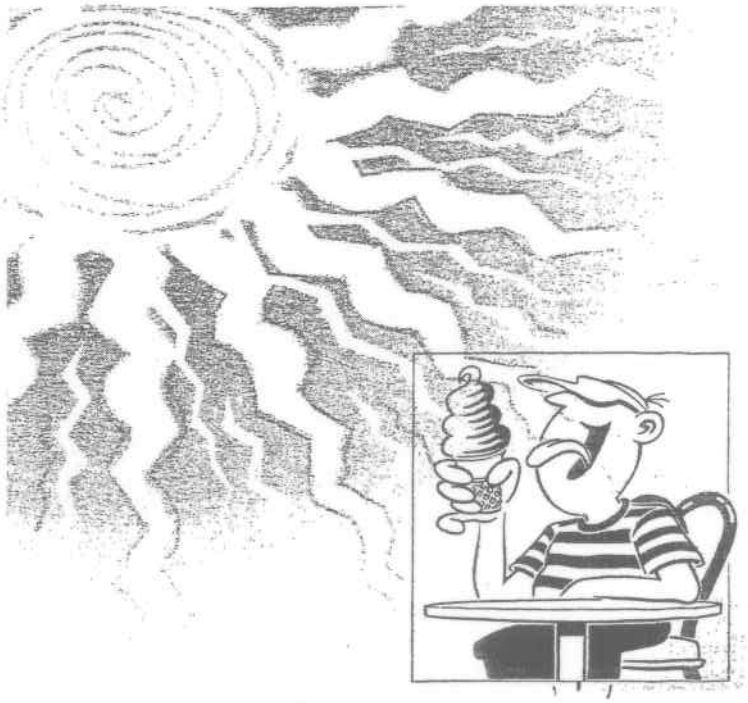
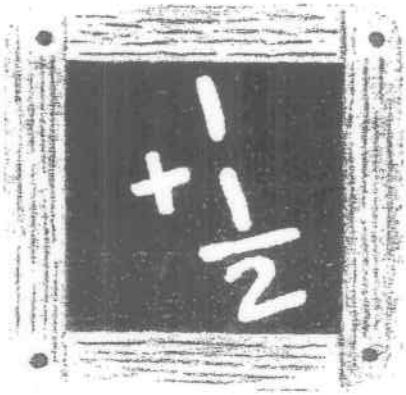
NAME: _____

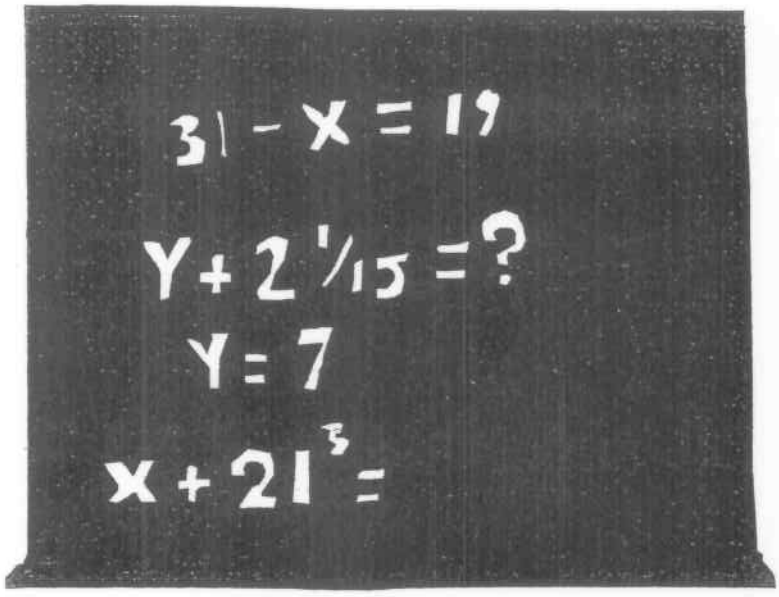
Super Understanding of Mathematics Magnifies Everything Reviewed in school





Third Grade

Garrett Park E.S.



NAME: _____

Super

Understanding of

Mathematics

Magnifies

Everything

Reviewed in school.

Third Grade

Garrett Park

E.S.

Summer Math Calendar

Going into **Fourth 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
Buy a small bag of M & M's. Pour them into a jar. Estimate how many M & M's are in the jar. Count the candy to see how close you are.	Look at advertisements for cars in the newspaper. Choose a car you like and round the price to the nearest thousand.	Using a restaurant menu, have each family member decide what he/she would order. Find the total cost of all the meals they chose.	Write the multiplication and division fact families for the following sets of numbers: 3, 5, and 15 4, 6, and 24 2, 9, and 18	Draw two cards from a deck of cards (number cards only). Find the sum and difference of the cards. Repeat this 10 times
Measure your height in inches. Measure the height of a parent. Write and solve an equation to determine how much taller your parent is than you.	Create a time line for yesterday beginning at the time at which you woke up and ending at the time you went to bed. Include at least 8 events on your time line.	Gather 4 different boxes of food such as rice or cereal. Measure the width of each box in inches and centimeters. Which box is the thinnest? Which box is the widest?	Estimate the weight of a handful of coins. Weigh them to find their actual weight and calculate the difference between your estimate and the actual weight. Repeat this with other items.	Go to the store with a parent. Record the time you arrive and the time you leave. How much time did you spend in the store?
Determine what time it is now. What time will it be in one half hour from now? Forty- five minutes from now?	Survey 10 people and ask them what their favorite animal is. Create a bar graph to show your results.	Roll two dice. Multiply the two numbers rolled and write an equation to show this. Repeat this 10 times.	Flip a coin 10 times. Record how many times it landed on heads and tails. Multiply those two numbers together. Now have a friend do the same. Repeat this 4 times. The person with the highest product wins.	What is the greatest and the least number you can make using the digits 1, 4, 8, 2, 3 and 7? You may use each digit only once in a number.
Make a list (with products up to 100) of all the multiplication facts that are doubles (ex. 1 x 1= 1).	Take turns rolling 3 dice with a partner. After each turn find the product of the 3 numbers. Record your products and add them together after each turn. The first person to reach 500 wins.	Write an equation showing how 12 cookies could be shared between 2, 3, 4, and 6 children.	See how many different ways you can divide 20 colored pencils or crayons equally. Write a division equation for each way you find.	Count the number of windows and doors in your home. Determine if these numbers are odd or even.

Name _____

C. Schoenfelder

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

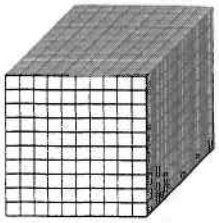
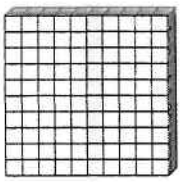
http://www.kidsites.com
List of sites for math as well as other subjects.

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

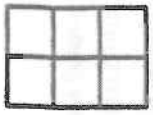
Third Grade Math Glossary

Place Value- The value of each place in a number. Example: in 7,943, the digit 7 is in the thousands place.

Thousands	Hundreds	Tens	Ones
			
7	9	4	3

Digit- Any of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

Standard Form- The usual way to write a number, using digits.
Example: The standard form of twenty-seven is 27.

Area- The number of square units needed to cover a figure. If the unit square is 2 square centimeters, then the area of this figure is 6 square centimeters. 

Product- The answer in a multiplication problem. 7 x 2= 14 ← product

Quotient- The answer in a division problem. 16 ÷ 4 = 4 ← quotient

Commutative Property- Changing the order of the factors does not change the answer. Examples: 4 x 5= 5 x 4 6 + 4 = 4 + 6

Equation- A number sentence which states that two amounts are equal.
Examples: 2 x 3= 6 5 + 7 = 12

Expression- A part of a number sentence that has numbers and operation signs but does not have an equal sign. Examples: 5 x 8 12-9

Third Grade Math Glossary

Variable- A letter or symbol that stands for any number. $Z + 5 = 7$, $Z = 2$

Mixed Number- Numbers that have a whole number and a fraction.
Example- $3\frac{1}{2}$

Capacity- The amount of liquid a container can hold.

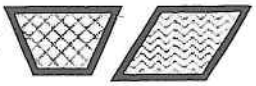
Liter- A metric unit of capacity

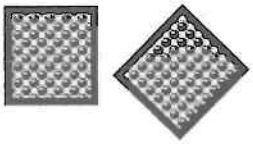
Mass- How much matter an object takes up. It is often measured by how much something weights. Often measured with grams or kilograms.

Gram- A small metric unit used to measure mass or heaviness. 1 gram is about the weight of one large paper clip.

Kilogram- A larger metric unit used to measure mass. 1 kg= 1,000 grams

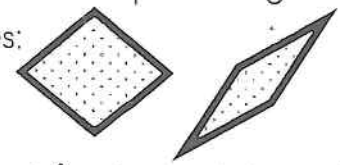
Polygon- A closed figure with all straight sides. Examples:

Quadrilateral- A polygon with four sides and four angles. Examples: 

Square- A quadrilateral with four sides that are the same length and four right angles. Examples: 

Rectangle- A quadrilateral in which opposite sides are the same length.

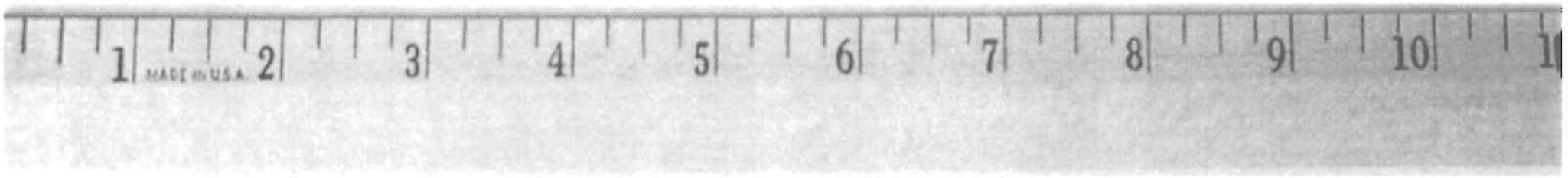
Parallelogram- A quadrilateral whose opposite sides are parallel and the same size length. Example:

Rhombus- A parallelogram with four sides that are the same length.
Examples: 

Trapezoid- A quadrilateral with only one pair of parallel sides. Example:

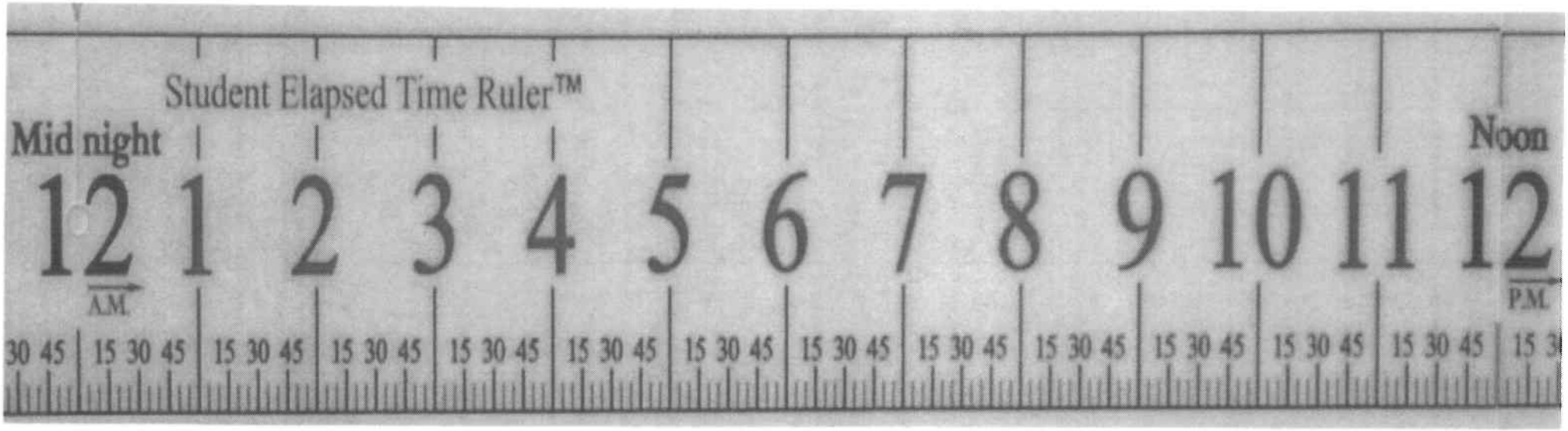
Resources to Cut and Use!

Inch Ruler



Number Line

Elapsed Time Ruler


Student Elapsed Time Ruler™
Mid night
Noon
12 1 2 3 4 5 6 7 8 9 10 11 12
A.M.
P.M.
30 45 15 30 45 15 30 45 15

A	3	5	*Thirty addition facts*	THE MAD MINUTE

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

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A	6	1	Thirty subtraction facts	THE MAD MINUTE

18 −9	9 −2	8 −7	11 −9	10 −7	8 −8	7 −5	14 −7	16 −9	5 −2
10 −9	3 −2	8 −1	17 −9	15 −7	8 −6	13 −9	13 −7	9 −5	1 −0
15 −9	4 −3	6 −6	11 −7	14 −9	12 −4	9 −3	2 −1	16 −7	12 −9

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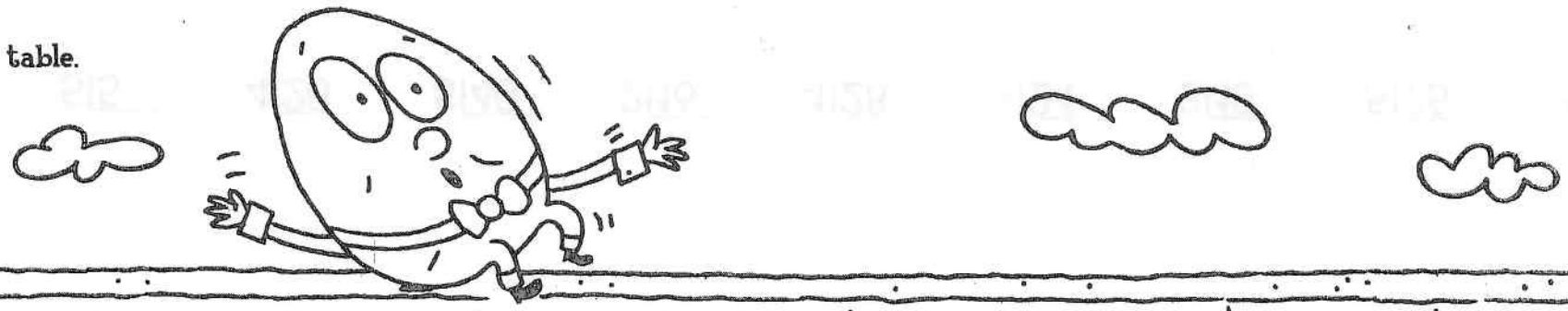
Concept of Multiplication, Multiplication Facts

Name _____ Date _____

Fill in the table.



1 x 1 =	1 x 2 =	1 x 3 =	1 x 4 =	1 x 5 =	1 x 6 =	1 x 7 =	1 x 8 =	1 x 9 =
2 x 1 =	2 x 2 =	2 x 3 =	2 x 4 =	2 x 5 =	2 x 6 =	2 x 7 =	2 x 8 =	2 x 9 =
3 x 1 =	3 x 2 =	3 x 3 =	3 x 4 =	3 x 5 =	3 x 6 =	3 x 7 =	3 x 8 =	3 x 9 =
4 x 1 =	4 x 2 =	4 x 3 =	4 x 4 =	4 x 5 =	4 x 6 =	4 x 7 =	4 x 8 =	4 x 9 =
5 x 1 =	5 x 2 =	5 x 3 =	5 x 4 =	5 x 5 =	5 x 6 =	5 x 7 =	5 x 8 =	5 x 9 =
6 x 1 =	6 x 2 =	6 x 3 =	6 x 4 =	6 x 5 =	6 x 6 =	6 x 7 =	6 x 8 =	6 x 9 =
7 x 1 =	7 x 2 =	7 x 3 =	7 x 4 =	7 x 5 =	7 x 6 =	7 x 7 =	7 x 8 =	7 x 9 =
8 x 1 =	8 x 2 =	8 x 3 =	8 x 4 =	8 x 5 =	8 x 6 =	8 x 7 =	8 x 8 =	8 x 9 =
9 x 1 =	9 x 2 =	9 x 3 =	9 x 4 =	9 x 5 =	9 x 6 =	9 x 7 =	9 x 8 =	9 x 9 =

$2\overline{)12}$	$3\overline{)0}$	$5\overline{)15}$	$4\overline{)12}$	$2\overline{)2}$	$3\overline{)15}$	$2\overline{)6}$	$4\overline{)36}$	$5\overline{)30}$	$5\overline{)20}$
$3\overline{)12}$	$4\overline{)8}$	$2\overline{)14}$	$5\overline{)0}$	$4\overline{)16}$	$2\overline{)4}$	$4\overline{)32}$	$5\overline{)35}$	$2\overline{)0}$	$3\overline{)3}$
$5\overline{)45}$	$5\overline{)5}$	$4\overline{)20}$	$5\overline{)40}$	$2\overline{)16}$	$4\overline{)28}$	$3\overline{)24}$	$2\overline{)10}$	$5\overline{)25}$	$3\overline{)6}$

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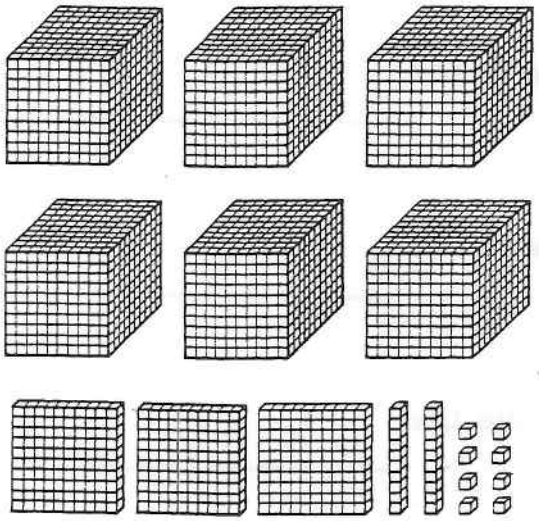
Name

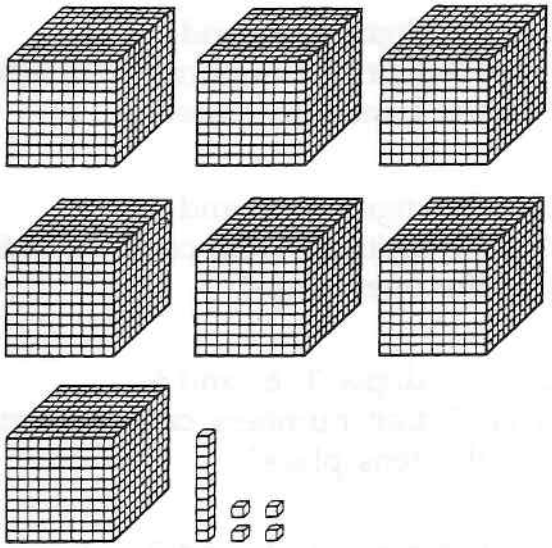
EXTRA PRACTICE

THOUSANDS

Write each number.

1. 

_____

2. 

_____

3. 1 thousand 6 hundreds 8 tens 9 ones _____

4. 5 thousands 2 hundreds 8 tens 0 ones _____

5. 6 thousands 5 hundreds 0 tens 0 ones _____

6. four thousand, three hundred ninety-two _____

7. two thousand, seventy-one _____

8. nine thousand, four hundred three _____

What does the digit 6 mean in each number?

9. 7,630	10. 4,169	11. 6,005	12. 693	13. 5,476
_____	_____	_____	_____	_____

Write each number.

14. 5,000 + 700 + 30 + 4 = _____

15. 9,000 + 300 + 90 + 1 = _____

16. 6,000 + 9 = _____

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Name _____

EXTRA PRACTICE

PROBLEM SOLVING: STRATEGIES

Make a list to solve each problem.

1. Use the digits 6, 7, and 8.
   What 3-digit numbers can you write that have the 7 in the hundreds place? _____

2. Use the digits 0, 3, and 5.
   What 3-digit numbers can you write that have the 0 in the ones place? _____

3. Use the digits 3, 6, and 9.
   What 3-digit numbers can you write that have the 3 in the tens place? _____

4. Use the digits 1, 4, and 7.
   What 3-digit numbers can you write? _____

5. Use the digits 2, 4, and 5.
   What 3-digit numbers can you write? _____

6. Use the digits 0, 8, and 9.
   What 3-digit numbers can you write? _____

7. Use the digits 2, 6, and 7.
   a. What 3-digit numbers can you write? _____

   b. Put the numbers in order from least to greatest.

   _____

8. Use the digits 1, 4, 5, and 8.
   a. What 4-digit numbers can you write that have the 4 in the thousands place?

   _____

   b. Which number is the greatest? _____

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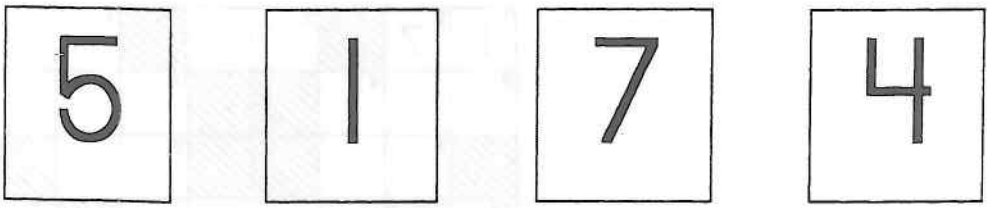
Name _____

Mystery Number

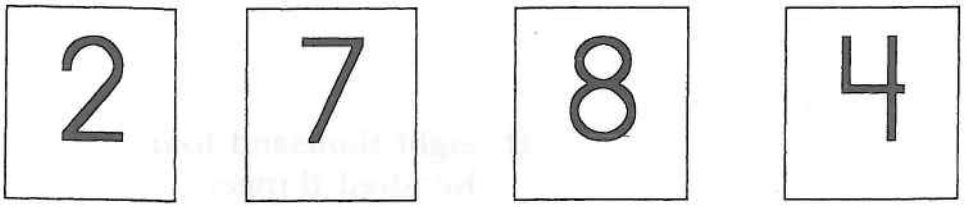
1. Look at the digits below. They are not in the correct order. Follow the clues and write the digits in the correct order on the line.



Clue #1: The digit in the tens place is equal to 2 + 3.
Clue #2: The value of the greatest digit is 7,000.
Clue #3: The digit in the ones place is an even number.
Clue #4: The smallest digit is in the hundreds place.

The number is _____ , _____ _____ _____

2. Look at the digits below. They are not in the correct order. Follow the clues and write the digits in the correct order on the line.



Clue #1: The digit in the tens place is equal to 6-2.
Clue #2: The greatest digit has a value of 800.
Clue #3: The digit in the ones place is an odd number.
Clue #4: The smallest digit is in the thousands place.

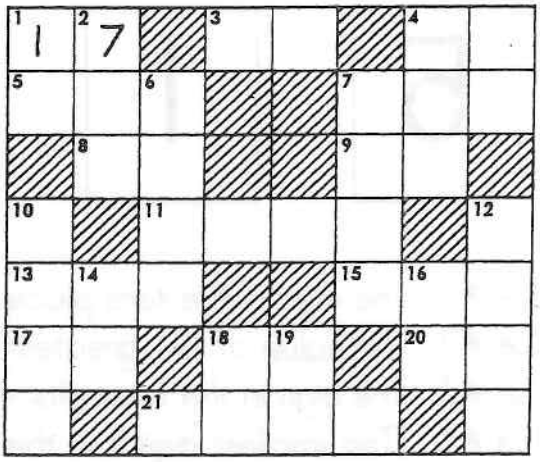
The number is _____ , _____ _____ _____

Name

ENRICHMENT

CROSS-NUMBER PUZZLE

Solve each clue.
Write the answer going across → or down ↓.
Only one digit goes in a box.



Across

1. 9 + 8
3. 18 + 72
4. 7 + 9
5. 585 + 247
7. 132 + 268
8. 5 tens
9. 28 + 48
11. 6 thousands 7 hundreds
13. 314 + 66
15. 89 + 25
17. 1 ten 5 ones
18. 4 + 9
20. 9 + 5 + 7
21. 54 hundreds

Down

1. 9 + 9
2. 468 + 267
4. 58 + 48
6. 2 thousands + 6 tens
7. 4 thousands 7 hundreds 1 one
10. 11 more than 9,300
12. eight thousand four hundred thirteen
14. 39 + 46
16. 1 ten + 2 ones
18. 3 + 8 + 3
19. 3 tens

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Name: _____

Addition Bingo

Find each sum and color it on the bingo boards. If you get a bingo, draw a line through the winning row.

a. $345 + 63$

b. $441 + 385$

c. $709 + 93$

d. $128 + 326$

e. $157 + 550$

f. $558 + 127$

g. $317 + 99$

h. $745 + 48$

i. $900 + 67$

j. $451 + 309$

k. $773 + 156$

l. $885 + 33$

Numbers might be on the left board, the right board, or both.

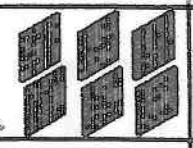
B	I	N	G	O
793	42	307	707	86
802	201	894	416	129
454	340	FREE	383	400
929	655	967	191	523
408	83	619	675	897

B	I	N	G	O
185	685	767	255	826
702	50	419	707	905
617	203	FREE	640	408
472	918	46	693	917
760	118	280	967	212

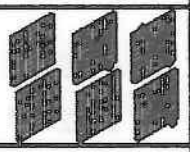
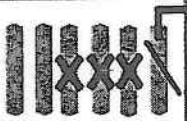
Subtracting with Blocks

Use place value blocks to model the top number. Then, subtract the bottom number using the blocks to help you.

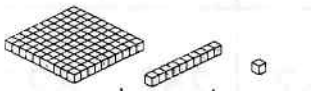
Example: 665
−337

Hundreds	Tens	Ones
		
− 3	3	7

Example: 665
−337
3 2 8

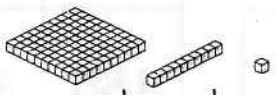
Hundreds	Tens	Ones
		
− 3	3	7
3	2	8

a.



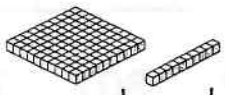
3	4	6
- 1	8	5

b.



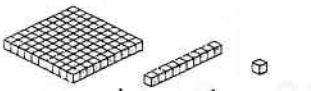
9	2	2
- 4	5	6

c.



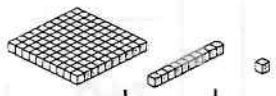
5	3	4
- 3	5	7

d.



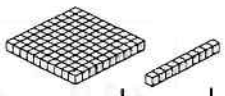
7	0	3
- 4	1	2

e.



6	8	1
- 3	7	9

f.



2	9	6
- 1	7	9

Subtracting Across Zeroes

600	700	200
- 246	- 605	- 180
500	600	200
- 23	- 344	- 174

ENRICHMENT
FILL IN THE BOXES

Add or subtract.
Write >, <, or = in the ☐.

4 + 6 ☐ 3 + 7

10 10

5 + 4 ☐ 10 − 3

___ ___

10 + 0 ☐ 10 − 0

___ ___

2 + 3 + 4 ☐ 5 + 5

___ ___

3 + 5 + 0 ☐ 9 − 2

___ ___

10 − 4 + 1 ☐ 1 + 6

___ ___

4 + 2 + 4 ☐ 9 − 6 + 2

___ ___

7 − 1 − 2 ☐ 1 + 4 + 1

___ ___

eight plus one ☐ nine minus one

___ ___

ten minus two ☐ three plus seven minus three

___ ___

Student Name: _____ Score:

One-Step Equations – Addition and Subtraction

Solve the one-step equations:

$x + 4 = 5$	$x - 1 = 3$
$y - 3 = 4$	$y + 5 = 5$
$s + 8 = 9$	$s - 7 = 0$
$n - 6 = 3$	$n + 9 = 11$

Name _____ Date _____

"Happy Birthday to You"

Solving Equations with Whole Numbers—Addition and Subtraction

Just about everybody knows the song "Happy Birthday to You." Composed in 1893, it has been sung at birthday parties for more than 100 years. Two sisters wrote the song. Who were they?

Answer:

18	15	41	69	8	11	69	31	146	69

19	31	72	72	7	6	15	41	41

To answer the question, solve the equations. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. Some letters will not be used.)

E. $8 + n = 19$

$n =$ _____

P. $n - 7 = 12$

$n =$ _____

N. $101 = n - 45$

$n =$ _____

A. $n + 12 = 43$

$n =$ _____

D. $56 = n - 13$

$n =$ _____

I. $n + 14 = 29$

$n =$ _____

U. $n - 8 = 8$

$n =$ _____

H. $n = 82 - 76$

$n =$ _____

K. $n = 324 - 192$

$n =$ _____

R. $26 + n = 34$

$n =$ _____

M. $92 + n = 110$

$n =$ _____

T. $n - 18 = 54$

$n =$ _____

S. $n - 32 = 51$

$n =$ _____

L. $17 + n = 58$

$n =$ _____

Y. $n + 65 = 72$

$n =$ _____

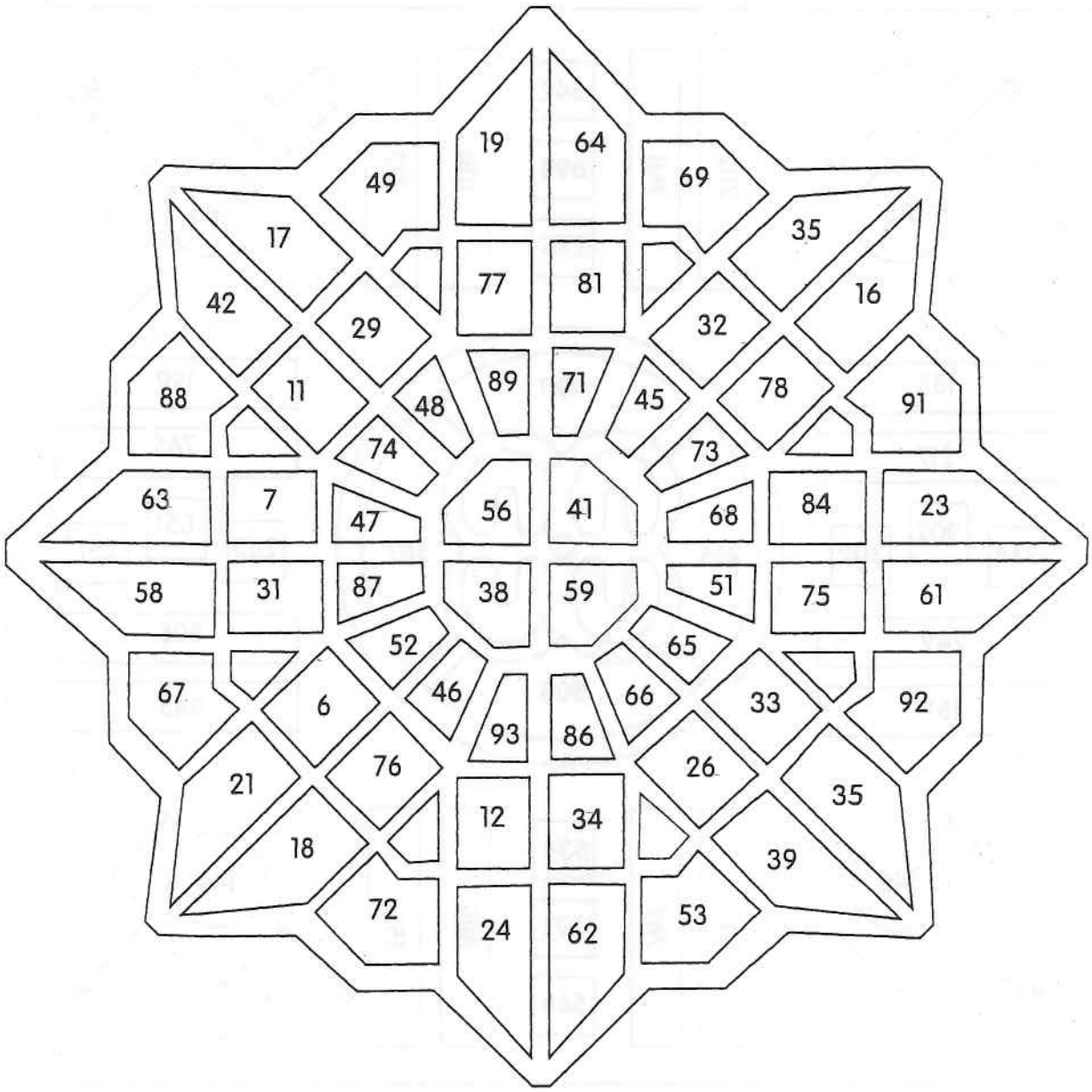
Name _____

ESTIMATION

Rounding to the Nearest Ten

THAILAND

Twinkling Star



Round each number to the nearest ten.

If the number rounds to	Color the shape
10, 30, or 80	orange
20, 40, or 60	purple
50, 70, or 90	green

Fill in the other shapes with colors of your choice.

Brain Teaser

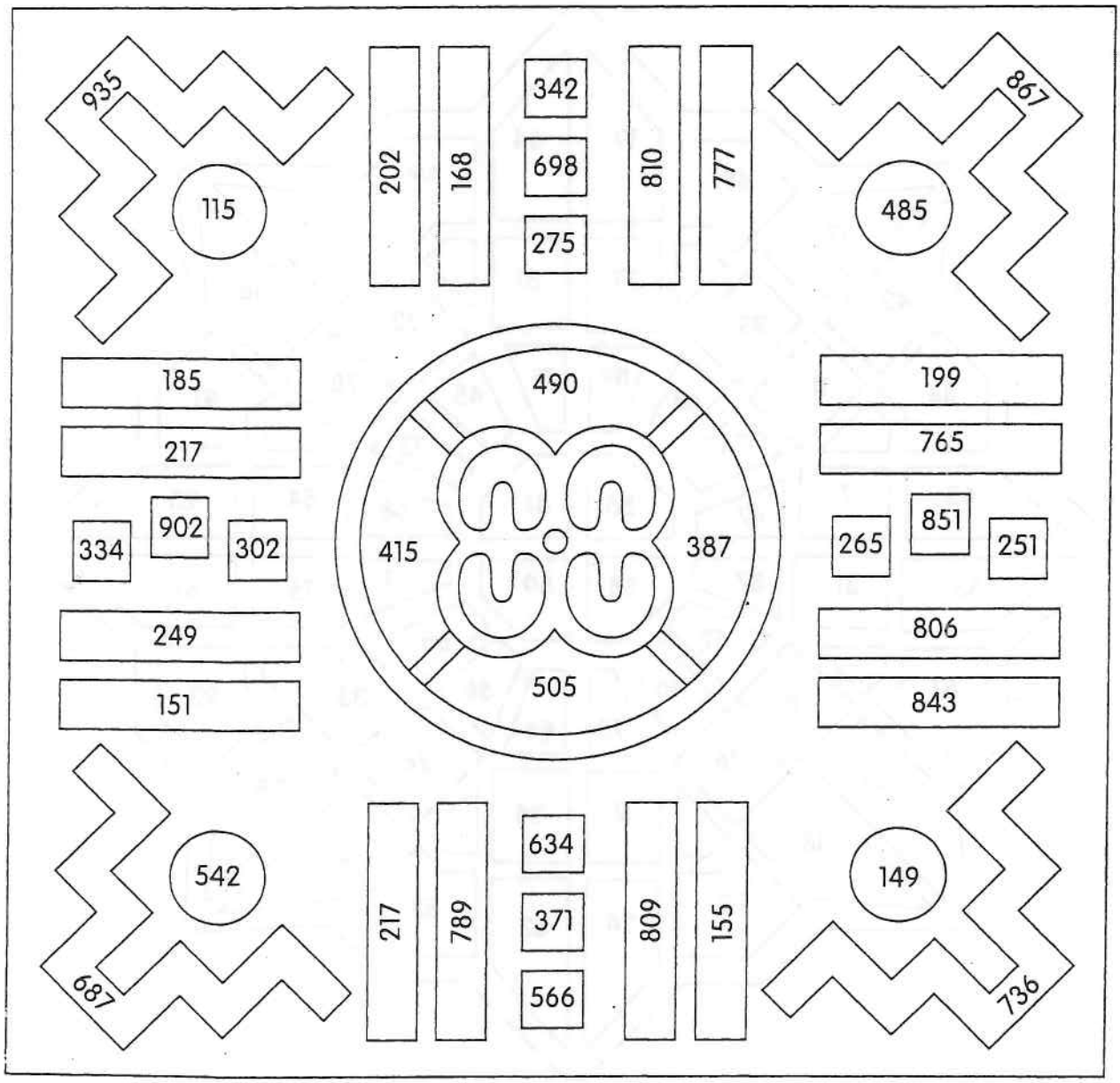
Write three different numbers that each round to 60.

Math Line Designs From Around the World 2-3 © 2008 by Cindi Mitchell, Scholastic Teaching Resources

Name _____

GHANA

Colorful Cloth



Round each number to the nearest hundred.

If the number rounds to	Color the shape
100 or 500	**orange**
200 or 800	**blue**
300 or 600	**yellow**
400, 700, or 900	**green**

Brain Teaser

Write the largest possible number that rounds to 400.

Fill in the other shapes with colors of your choice.

Math Line Designs Around the World 2-3 © 2008 by Cindi Mitchell, Scholastic Teaching Resources

Name

ENRICHMENT
NUMBER DETECTIVE

Use the clues to find each mystery number.

1. Rounding to the nearest hundred makes me 200.
   Rounding to the nearest ten makes me 240.
   The sum of my digits is 7.

   What number am I? _____

2. Rounding to the nearest hundred makes me 600.
   Rounding to the nearest ten makes me 590.
   The sum of my digits is 20.

   What number am I? _____

3. Rounding to the nearest ten makes me 410.
   If you read me forward or backward, I am still the same.

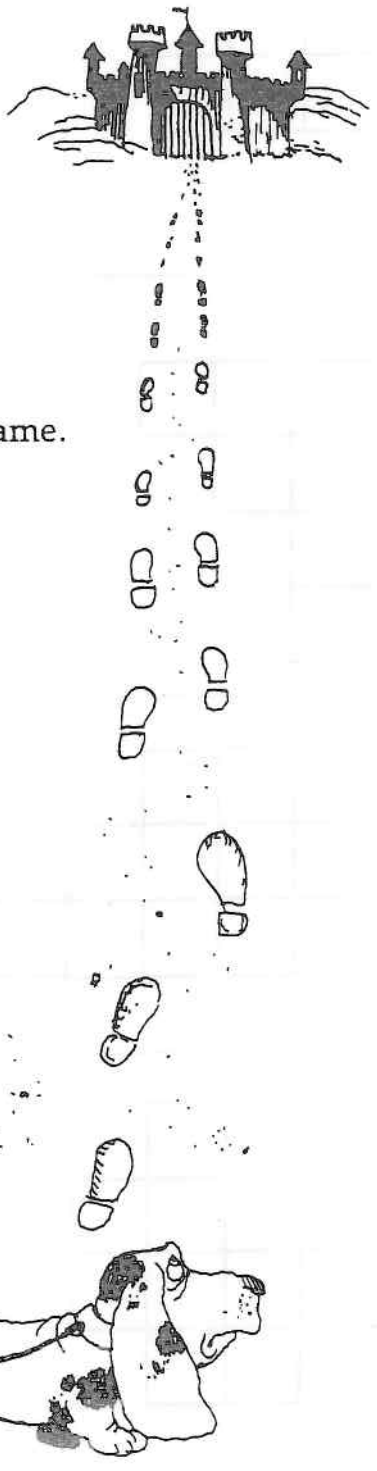
   What number am I? _____

4. Rounding to the nearest thousand makes me 7,000.
   Rounding to the nearest hundred makes me 6,700.
   All of my digits are the same.

   What number am I? _____

*5. The sum of my digits is 27.
   Rounding me to the nearest ten, hundred,
   or thousand will give you the same number.

   What number am I? _____



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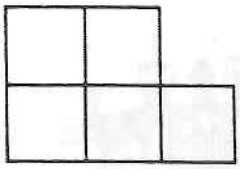
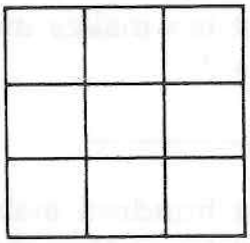
Name

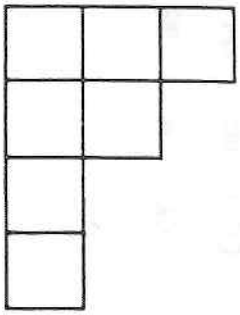
EXTRA PRACTICE

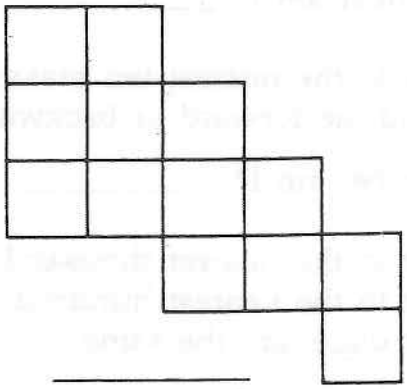
AREA

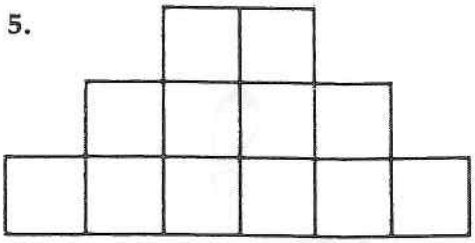
Find each area in square centimeters.

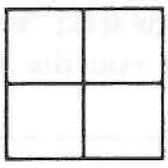
1. 

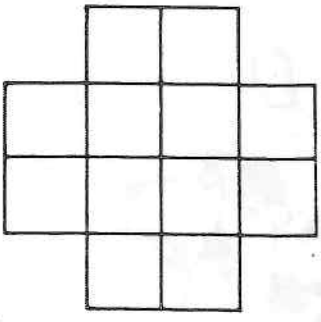
2. 

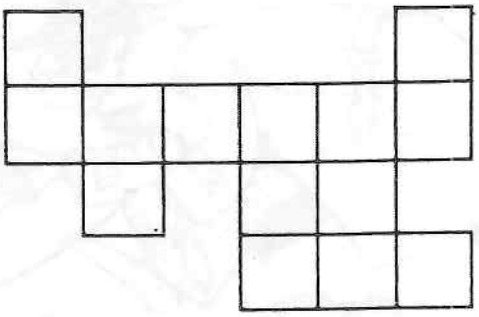
3. 

4. 

5. 

6. 

7. 

8. 

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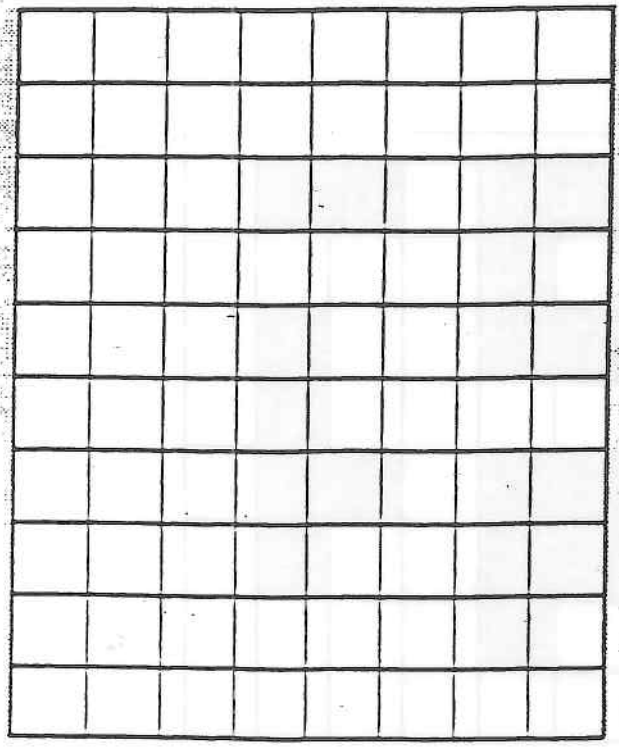
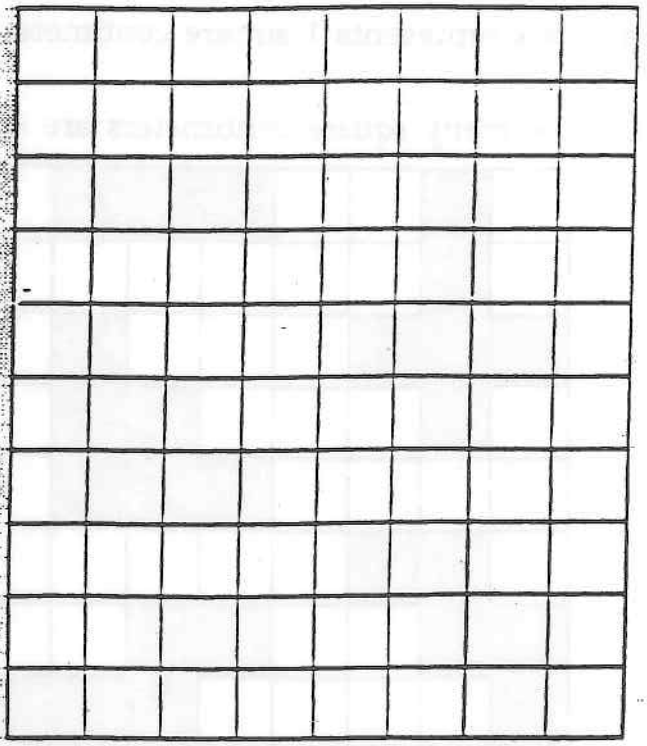
AREA

In each of the four spaces below, draw a shape that covers 24 square units.
Draw a different shape each time.

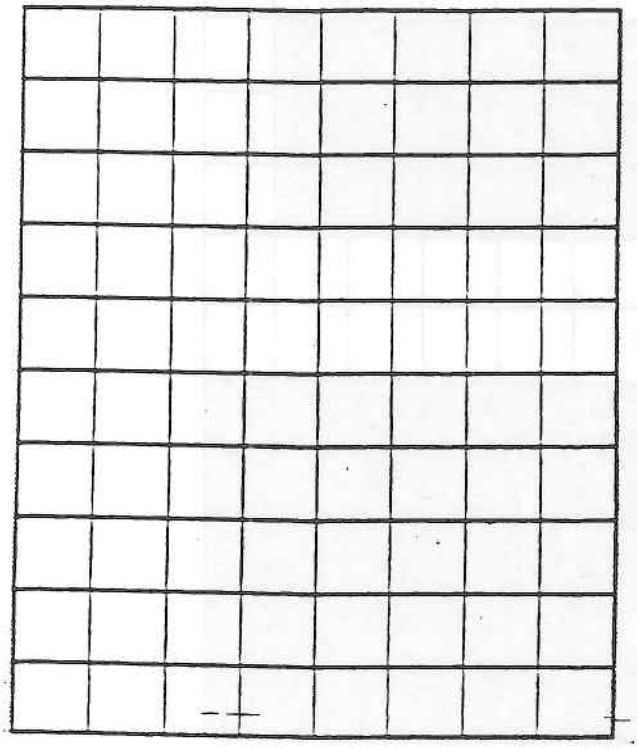
a.



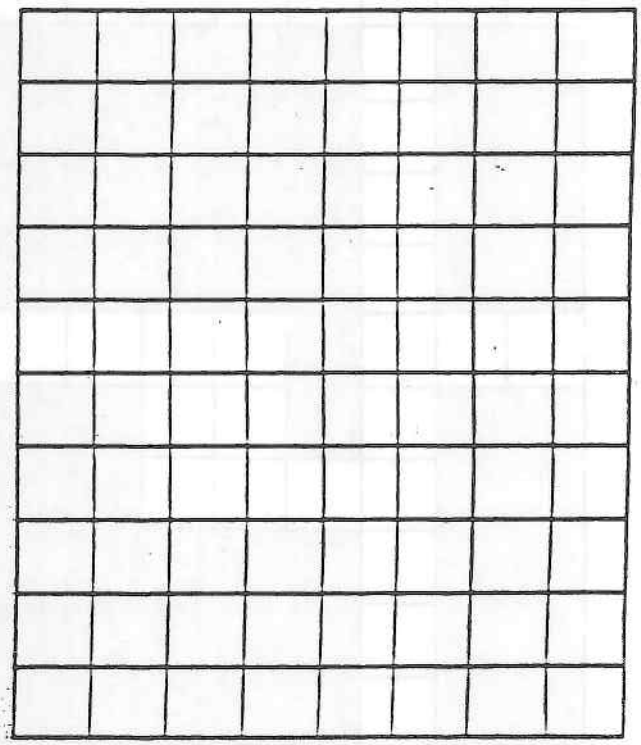
b.



c.



d.



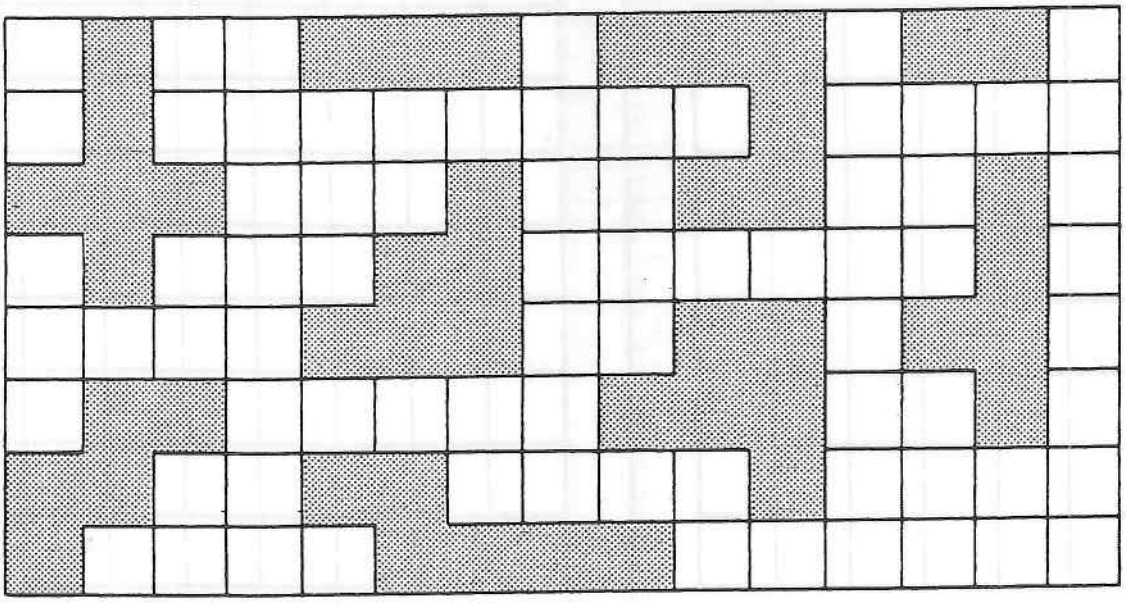
Name _____

ENRICHMENT

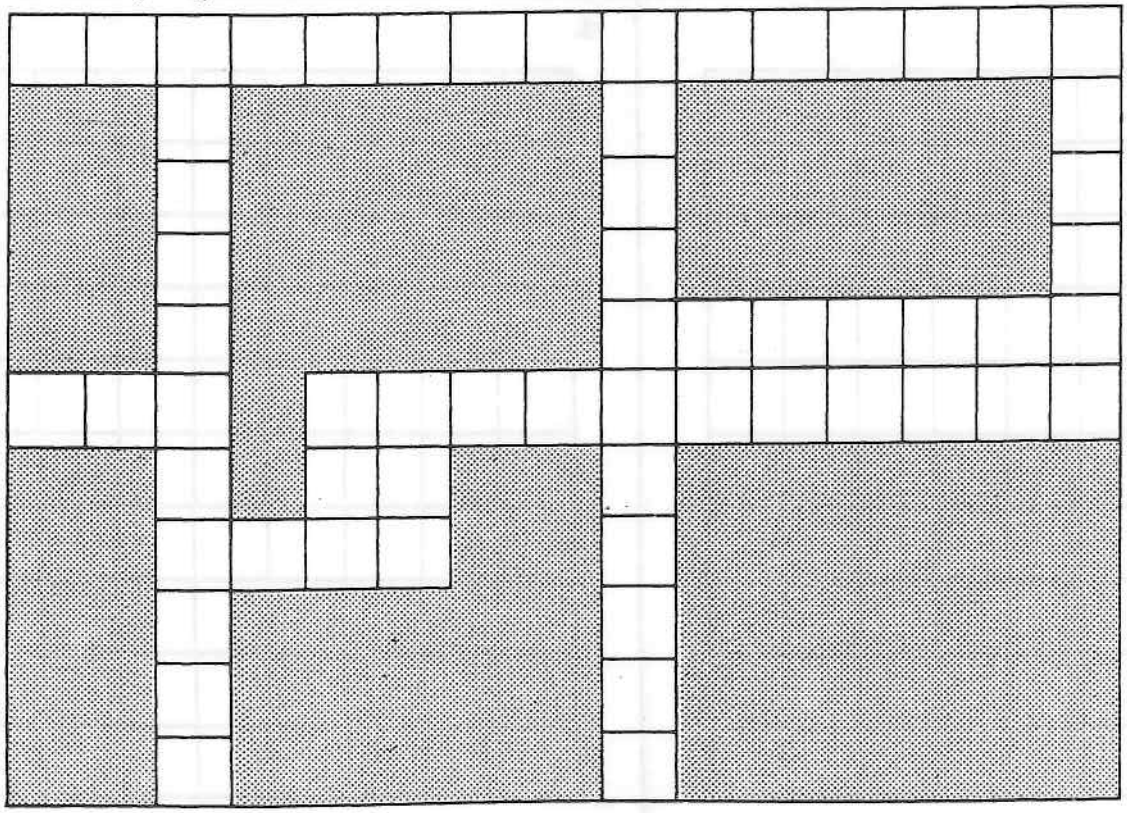
AREA CHALLENGES

Each box represents 1 square centimeter.

1. How many square centimeters are shaded? _____



2. How many square centimeters are shaded? _____



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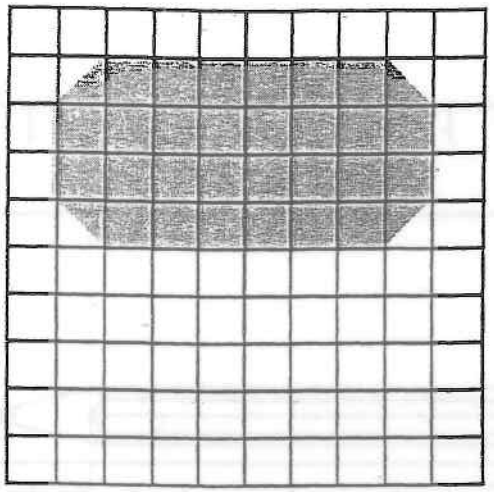
Partial Area

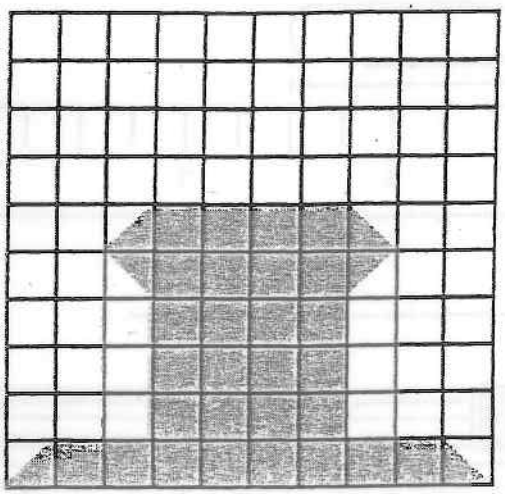
Directions: Find the area of the shaded region. Each box is equal to one square unit.

1)



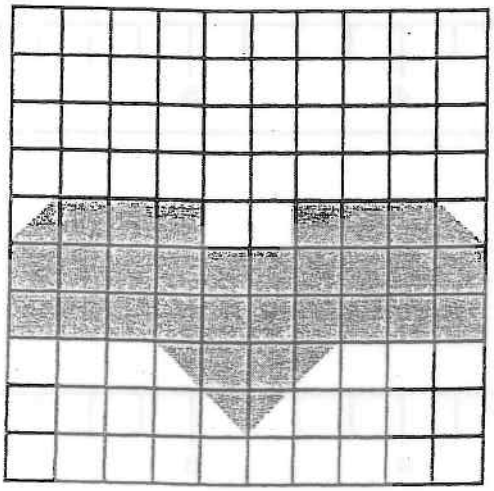
1. Area= _____

2)



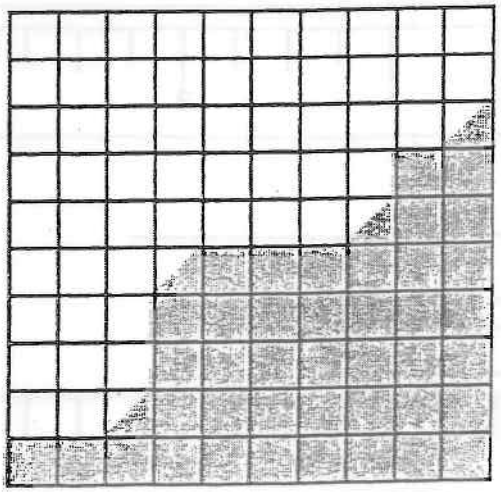
2. Area= _____

3)



3. Area= _____

4)



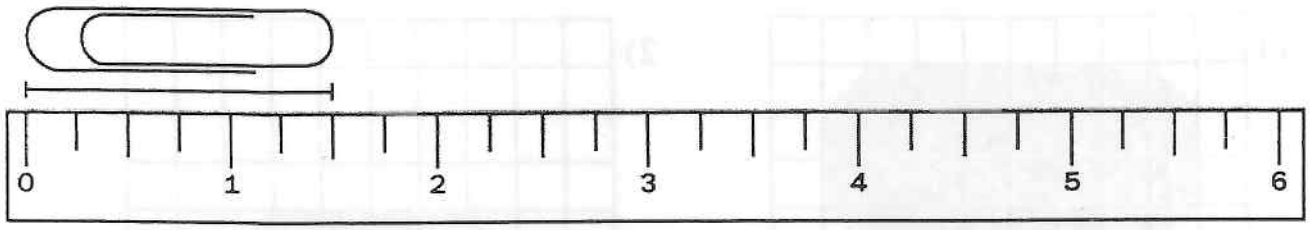
4. Area= _____

Name: _____

Measuring With a Ruler

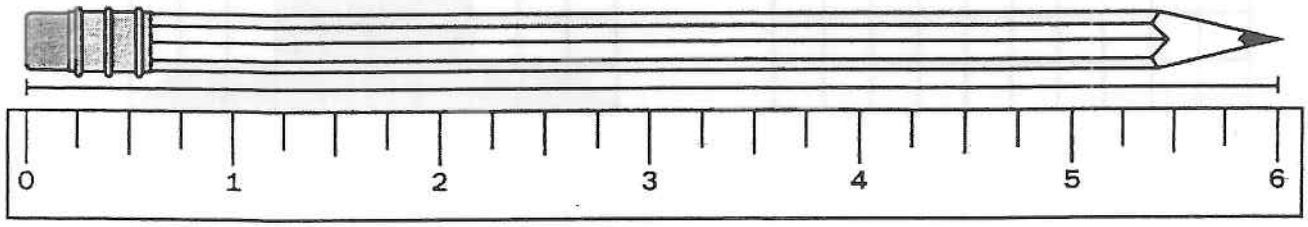
Measure to the nearest $\frac{1}{2}$ inch using the ruler shown.

a.



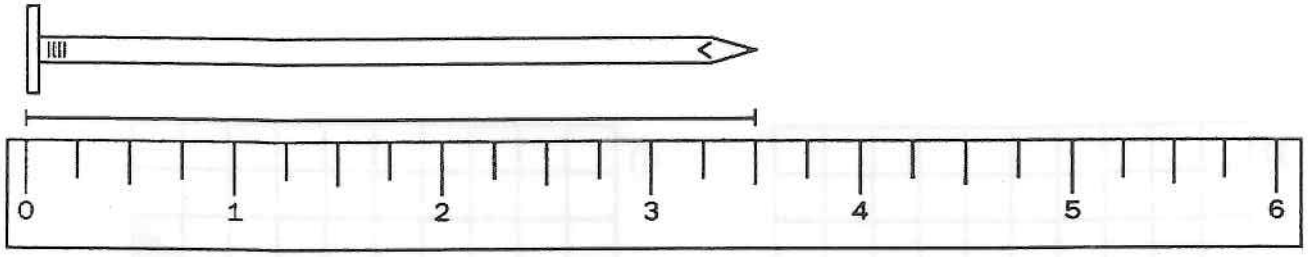
_____

b.



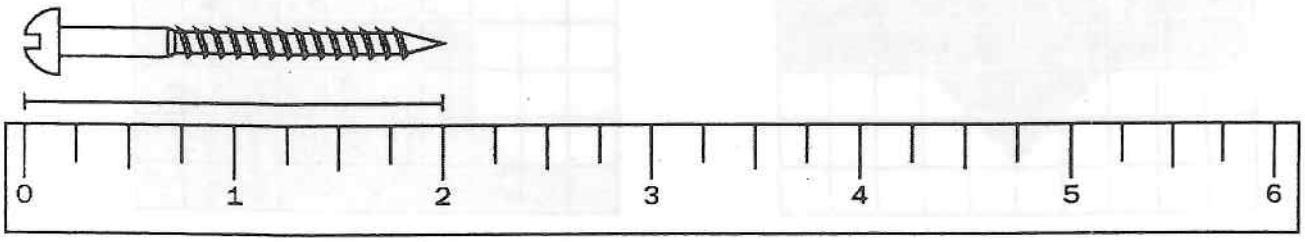
_____

c.



_____

d.



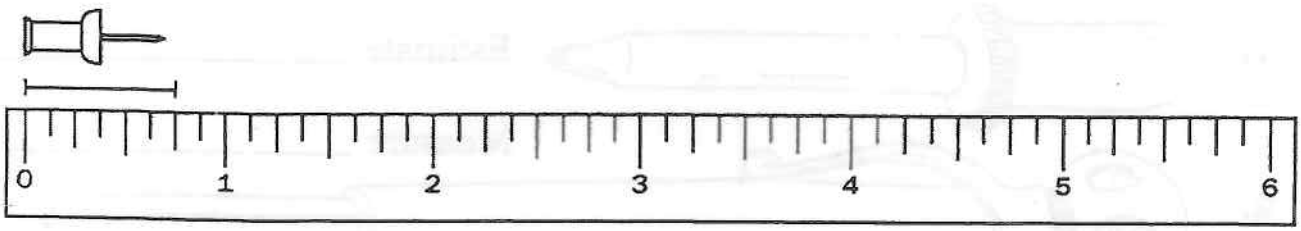
_____

Name: _____

Measuring With a Ruler

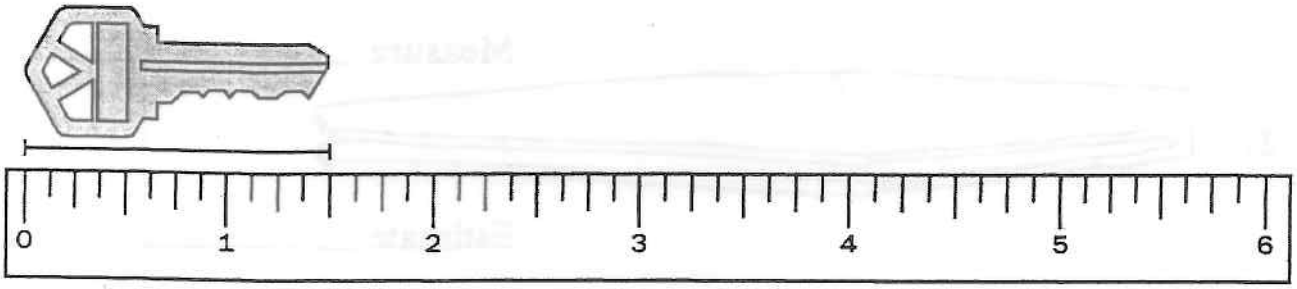
Measure to the nearest $\frac{1}{4}$ inch using the ruler shown.

a.



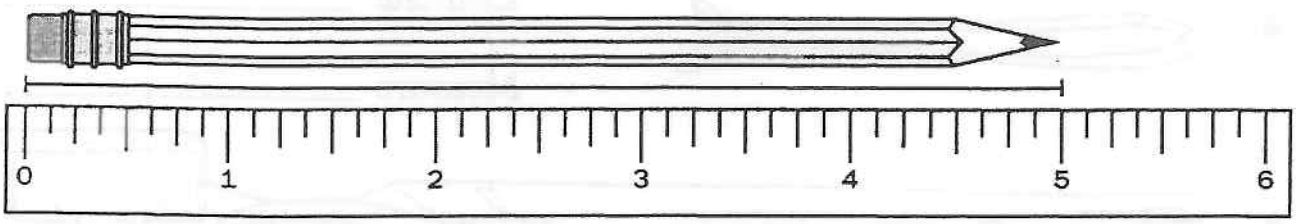
_____

b.



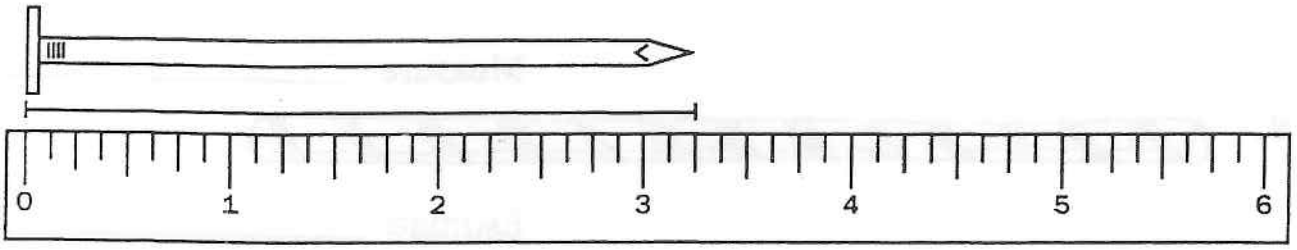
_____

c.



_____

d.



_____

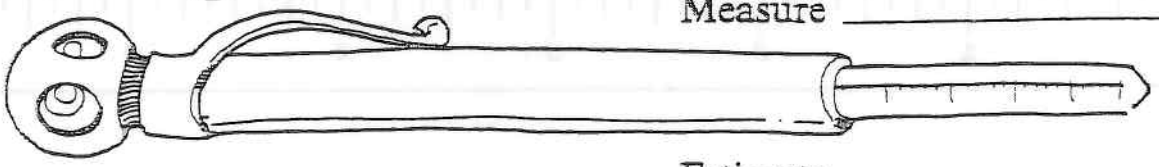
Measuring Length to the Nearest Inch

Estimate each object's length. Check your estimates by measuring to the nearest inch.

1.

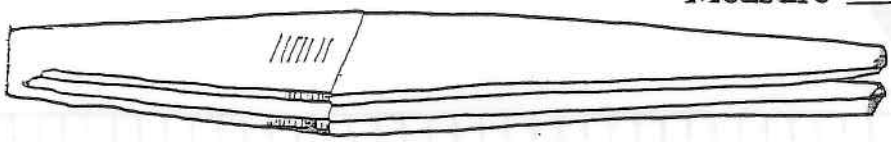
Estimate _____

Measure _____

2. 

Estimate _____

Measure _____

3. 

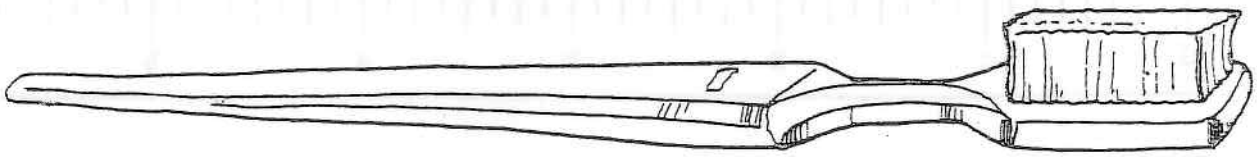
Estimate _____

Measure _____

4.

Estimate _____

Measure _____

5. 

Estimate _____

Measure _____

6.

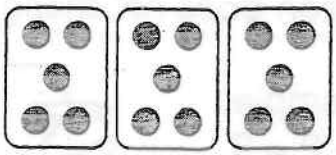
Estimate _____

Measure _____

Name _____

Algebra: Relate Multiplication and Division

Multiplication and division are opposite or **inverse operations.**



$$\underset{\text{factor}}{3} \times \underset{\text{factor}}{5} = \underset{\text{product}}{15}$$

3 groups of 5 equal 15 in all.

$$\underset{\text{dividend}}{15} \div \underset{\text{divisor}}{3} = \underset{\text{quotient}}{5}$$

15 divided into 3 equal groups equals 5.

Write the missing number for each number sentence.

1.

$4 \times ___ = 12$

$12 \div 4 = ___$

2.

$3 \times ___ = 12$

$12 \div 3 = ___$

3.

$6 \times ___ = 18$

$18 \div 6 = ___$

4.

$3 \times ___ = 18$

$18 \div 3 = ___$

Complete.

5. $4 \times ___ = 20$, so $20 \div 4 = ___$

6. $4 \times ___ = 16$, so $16 \div 4 = ___$

7. $3 \times ___ = 15$, so $15 \div 3 = ___$

8. $5 \times ___ = 30$, so $30 \div 5 = ___$

9. $2 \times ___ = 16$, so $16 \div 2 = ___$

10. $7 \times ___ = 21$, so $21 \div 7 = ___$

11. $3 \times ___ = 9$, so $9 \div 3 = ___$

12. $5 \times ___ = 35$, so $35 \div 5 = ___$

Name _____ Commutative property

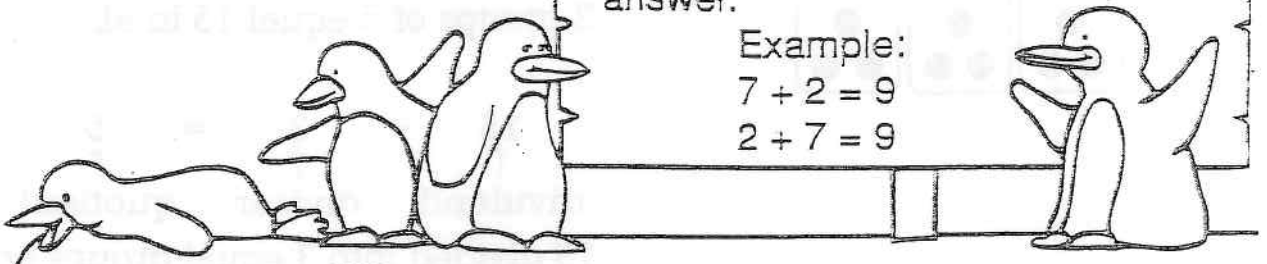
Cool Calculations

Read about the commutative property.
Then solve each equation.
If the commutative property can be used, show it by rewriting the equation.
The first one has been done for you.

Commutative Property

The commutative property states that switching the order of numbers in an equation does not change the answer.

Example:
7 + 2 = 9
2 + 7 = 9



A. 4 x 7 = 28
7 x 4 = 28

B. 6 + 3 = _____
_____

C. 5 x 7 = _____
_____

D. 3 x 8 = _____
_____

E. 3 + 2 = _____
_____

F. 4 – 3 = _____
_____

G. 7 + 8 = _____
_____

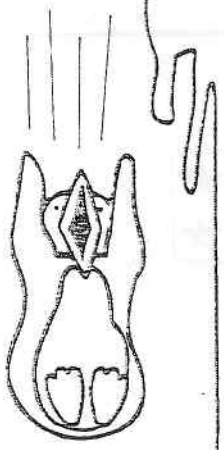
H. 9 – 6 = _____
_____

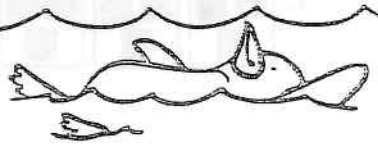
I. 6 – 2 = _____
_____

J. 5 x 2 = _____
_____

K. 9 x 4 = _____
_____

L. 5 + 2 = _____
_____





Think about the commutative property.
Then study your answers to the equations above.
Use the information you have learned to answer each question.

1. Does the commutative property work with subtraction? Explain why or why not.
_____
_____

2. Does the commutative property work with addition? Explain why or why not.
_____
_____

3. Does the commutative property work with multiplication? Explain why or why not. _____
_____

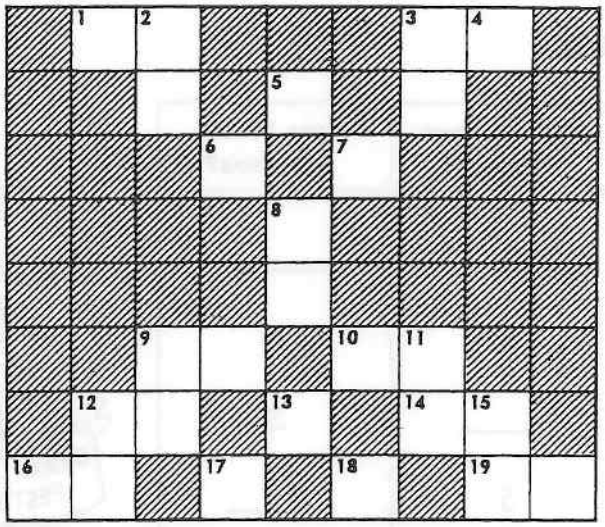
Name

ENRICHMENT

CROSS-NUMBER PUZZLE

Solve each clue. Write the answer going across → or down ↓. Only one digit goes in a box.

ACROSS



Across

1. the product of 8 and 9
3. the product of 6 and 6
5. the quotient of 24 divided by 3
6. the quotient of 18 divided by 6
7. _____ × 7 = 35
9. six 7s
10. 5 times 9
12. half of 30
13. the quotient of 32 divided by 4
14. eight 6s
16. the product of 5 times 4
19. 2 groups of 7

Down

2. 4 times 6
3. 16 twice
8. three 7s
9. nine 5s
11. 6 times 3 times 3
12. the product of 2 times 5
15. the product of 9 times 9
17. the quotient of 16 divided by 4
18. half of 14

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Name

ENRICHMENT

CHERRY BLOSSOM FESTIVAL

At the Cherry Blossom Festival, children made bunches of clay cherries.

Complete the chart.
Then, answer the questions below.

Student	Total Cherries Made	Cherries per Bunch	How Many Bunches?
Billy	35	5	_____
Doreen	_____	6	7
Linda	24	_____	3
Bob	40	5	_____
Darnell	36	9	_____
Paula	56	_____	7
Dawn	_____	6	5
Bonita	_____	4	6

1. Who made the most cherries? _____
2. Who had the most bunches of cherries in all? _____
3. Who had the fewest bunches in all? _____
4. Whose bunches had the most cherries in them? _____
5. Which two children made the same number of cherries?

   _____ and _____
6. How many cherries were made in all? _____

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Name

ENRICHMENT
VARIETY PAGE

What numbers belong? Complete the pattern.

1. 9, 12, 15, ____, 21, ____, 27
2. 21, 28, 35, ____, ____, 56, ____
3. 72, 64, 56, ____, 40, ____, ____, 16, ____
4. 81, 72, 63, ____, ____, 36, ____, ____, 9

5. Go from start to finish, connecting multiples of 6.

Start

6	18	53	39
17	36	11	53
54	25	31	47
12	24	30	42

Finish

6. Go from start to finish, connecting multiples of 4.

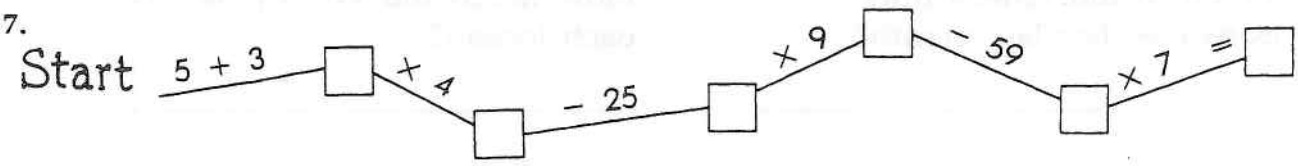
Start

4	20	28	8
3	17	21	16
13	14	32	22
37	25	12	24

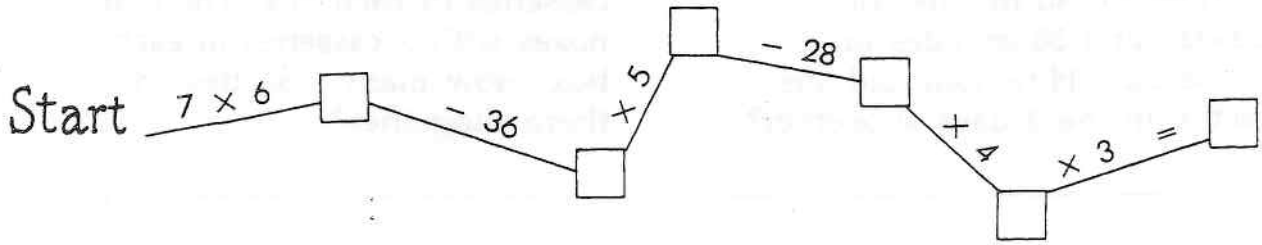
Finish

Path Math

7.



8.



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Name

EXTRA PRACTICE

PROBLEM SOLVING: APPLICATIONS

Solve each problem.

1. Martine bought 36 oranges. She put the same number of oranges in each of 4 bags. How many oranges are in each bag?

2. Felipe has 30 golf balls. He put 5 golf balls in each box. How many boxes did he use?

3. MacArthur High School has won 63 trophies. They are displayed 9 to a shelf. How many shelves are needed for the trophies?

4. There are 24 flowers in all. There are 6 flowers in each bunch. How many bunches of flowers are there?

5. A T-shirt store had 413 T-shirts in stock. Last week they sold 118 of the shirts. How many T-shirts do they have left?

6. There were 48 guitar strings in all in 8 plastic boxes. Each box had the same number of strings. How many guitar strings were in each box?

7. Janet takes flute lessons at the music store. Last month she took 5 lessons. Each lesson cost $9. How much did Janet's flute lessons cost her last month?

8. Wesley took tuba lessons. He paid $64 for 8 lessons. Each lesson cost the same amount. How much did Wesley pay for each lesson?

9. Clara plays the organ. She practiced for 40 minutes on Tuesday and 38 minutes on Wednesday. How long did she practice in the 2 days altogether?

10. There are 4 boxes with 5 cassettes in each box. There are 3 boxes with 7 cassettes in each box. How many cassettes are there altogether?

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Name

ENRICHMENT

MULTI-STEP PROBLEMS

Decide what operations are needed to solve the problem. Then solve.

1. Jill bought one record for $4.95 and another record for $3.95. She paid with a $10 bill. How much change did she receive? _____

2. Ted wants to buy a tape of his favorite band for $7.98 and a storage rack for $12.49. He has $15.00. How much more money does he need? _____

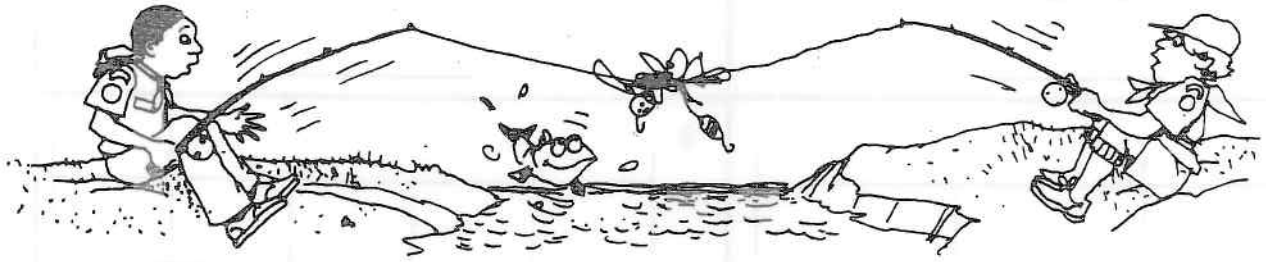
3. Ivan bought 5 pounds of hamburger meat for the cookout. Each pound will make 4 hamburgers. 17 people are coming to the cookout. If each person eats one hamburger, how many will be left over? _____

4. Orange juice costs 59¢ per container. Nell needs to buy 6 containers. She has $4.00. How much change will she receive? _____

5. Sabrina baby-sits twice a week for 2 hours at a time. She gets paid $3 an hour. What does she earn in 2 weeks? _____

*6. Tanya went to a book fair. She bought 2 books. One cost $6.95. The other cost $2.45 less. She paid with a $20 bill. How much change did she receive? _____

*7. 8 boy scouts went fishing. They fished for 5 hours and caught 20 fish in all. If 6 scouts caught 2 fish each, how many fish did the remaining scouts catch altogether? _____



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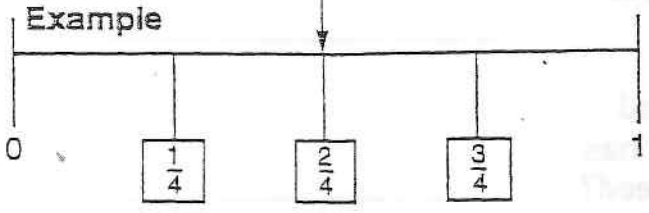
Practice 18

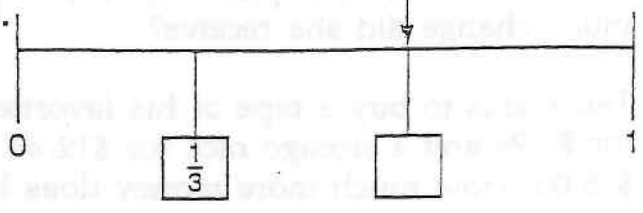
Directions: A fraction is a part of a whole item or amount. Complete each fraction sequence. Then write the fraction the arrow is pointing to on the line.

Example

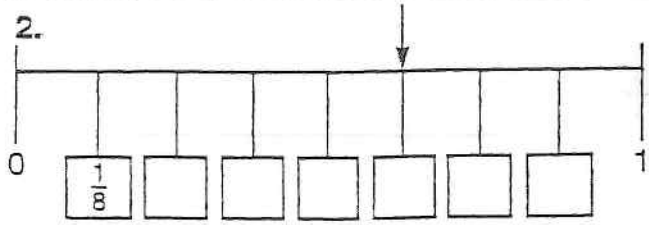


$\frac{2}{4}$

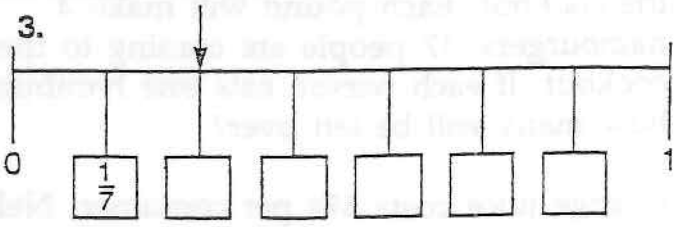
1.



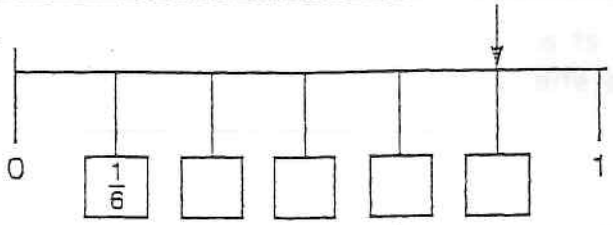
2.



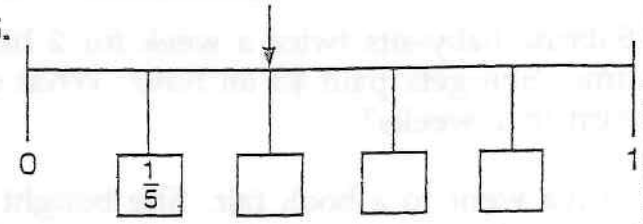
3.



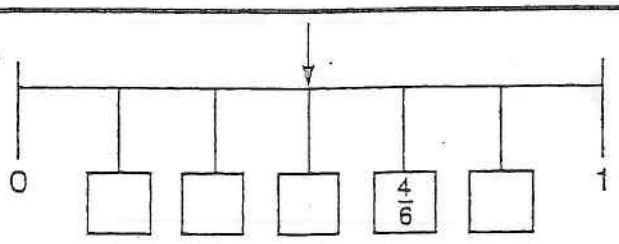
4.



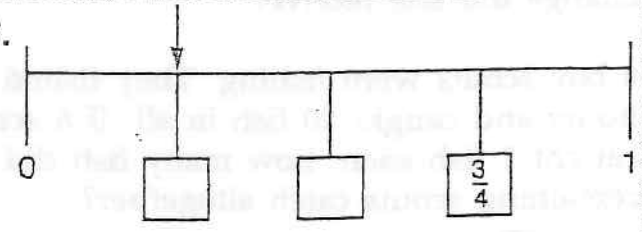
5.



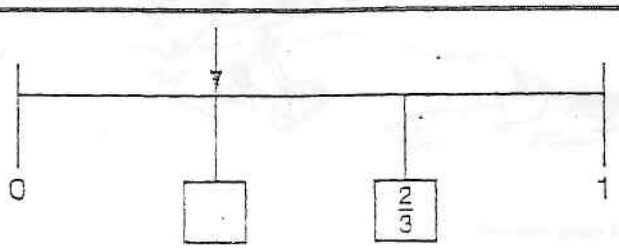
6.



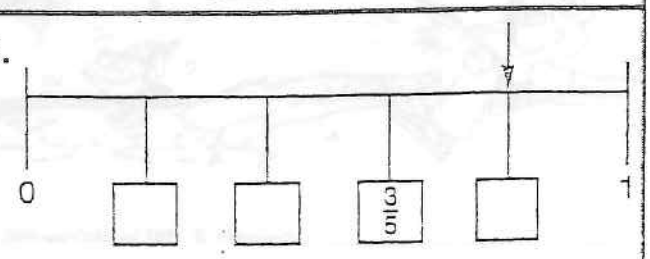
7.



8.



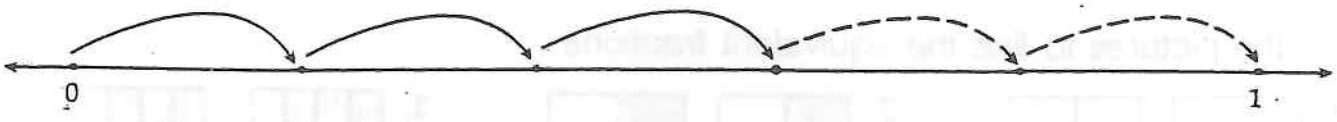
9.



To follow text page 241

Fractional numbers and the number line

Fractional numbers can be used to name points on the number line.



How many jumps from 0 to the point? → $\frac{3}{5}$ ← How many jumps in all from 0 to 1?

Give a fractional number for each ___.

1.

___

2.

___

3.

___

4.

___

5.

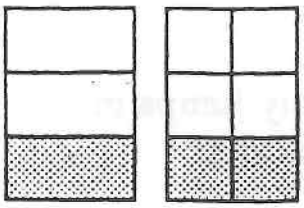
___

6.

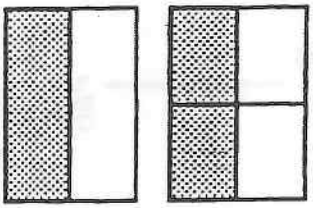
___ ___

FINDING EQUIVALENT FRACTIONS

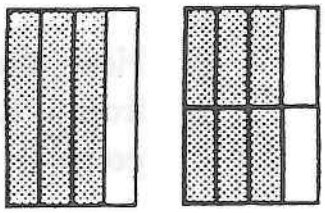
Use the pictures to find the equivalent fractions.

1. 

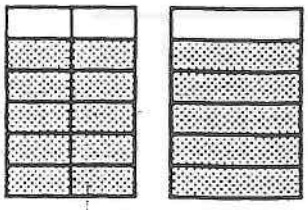
$\frac{1}{3} = \frac{\square}{\square}$

2. 

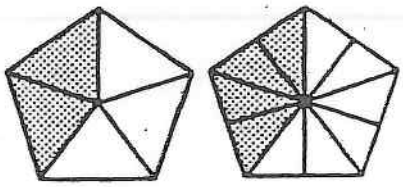
$\frac{1}{2} = \frac{\square}{\square}$

3. 

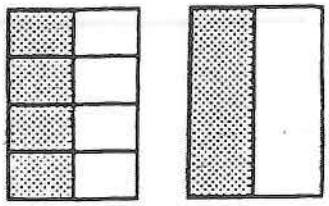
$\frac{3}{4} = \frac{\square}{\square}$

4. 

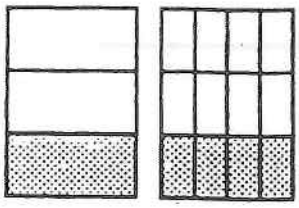
$\frac{10}{12} = \frac{\square}{\square}$

5. 

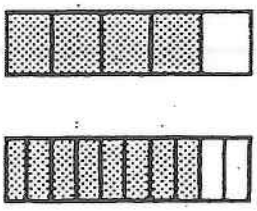
$\frac{2}{5} = \frac{\square}{\square}$

6. 

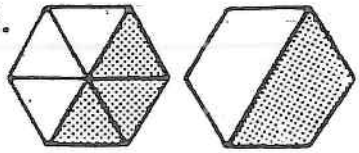
$\frac{4}{8} = \frac{\square}{\square}$

7. 

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

8. 

$\frac{4}{5} = \frac{\square}{\square}$

9. 

$\frac{3}{6} = \frac{\square}{\square}$

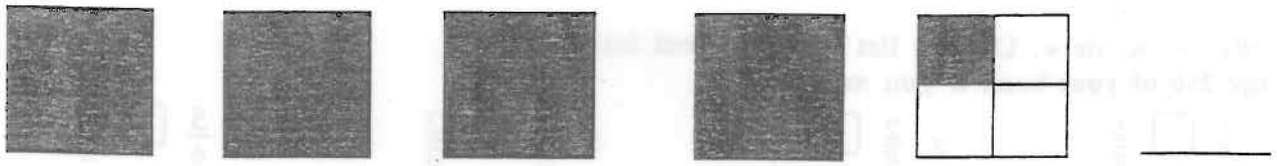
Solve.

10. One-third of Barney's garden has carrots. Two-sixths has radishes. Do the carrots and the radishes take up the same amount of space in the garden?

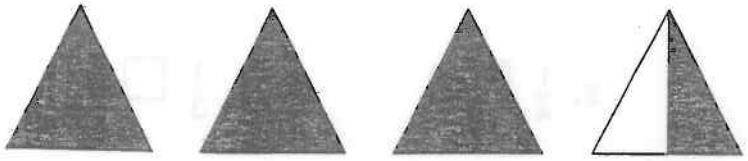
11. Three-fourths of Vicky's window box has marigolds. One-tenth has petunias. Do the flowers take up the same amount of space in the window box?

Mixed Numbers

Write the mixed number for each of the shaded models below.

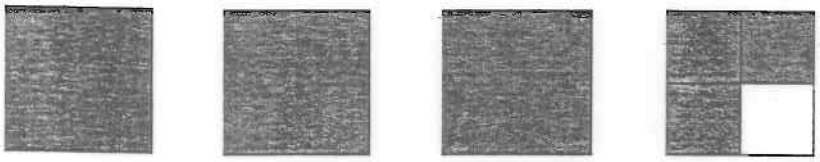


_____



_____

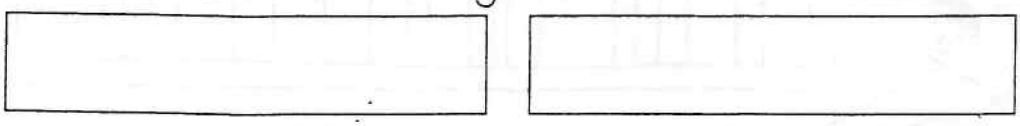
_____



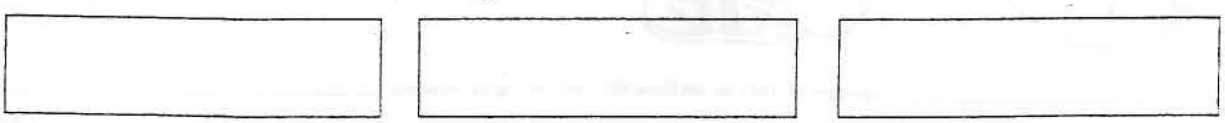
_____

Draw a shaded model to represent 4 ½ .	Draw a shaded model to represent 2 ¾ .

Shade in 1 ½ of the rectangles below.



Shade in 2 ¾ of the rectangles below.



Name _____

EXTRA PRACTICE
COMPARING FRACTIONS

Write >, <, or =. Use the list of equivalent fractions on page 256 of your book if you need to.

1. $\frac{7}{8} \square \frac{5}{8}$
2. $\frac{2}{5} \square \frac{4}{5}$
3. $\frac{4}{6} \square \frac{2}{3}$
4. $\frac{5}{6} \square \frac{1}{3}$
5. $\frac{1}{3} \square \frac{1}{2}$
6. $\frac{1}{2} \square \frac{3}{6}$
7. $\frac{1}{4} \square \frac{1}{5}$
8. $\frac{1}{3} \square \frac{3}{8}$
9. $\frac{4}{5} \square \frac{1}{2}$
10. $\frac{7}{8} \square \frac{2}{3}$
11. $\frac{3}{5} \square \frac{1}{3}$
12. $\frac{2}{3} \square \frac{8}{12}$
13. $\frac{1}{6} \square \frac{1}{4}$
14. $\frac{1}{4} \square \frac{2}{8}$
15. $\frac{3}{4} \square \frac{1}{2}$
16. $\frac{3}{5} \square \frac{2}{3}$

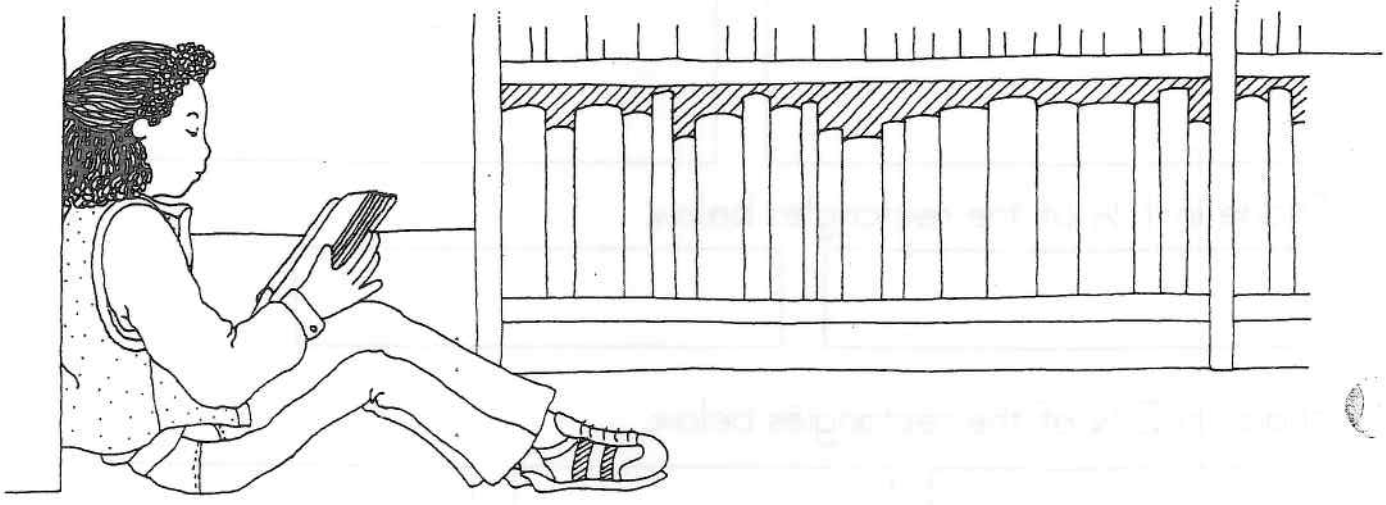
Solve each problem.

17. Elsa has read $\frac{3}{4}$ of a book. Dino has read $\frac{2}{3}$ of the same book. Who has read more?

_____

18. Norman has eaten $\frac{1}{6}$ of a pie. Betty has eaten $\frac{2}{8}$ of a pie. Who has eaten more pie?

_____



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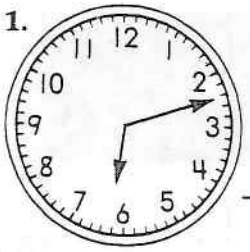
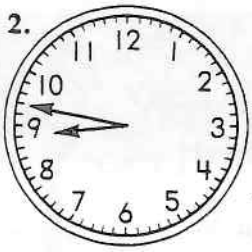
Name

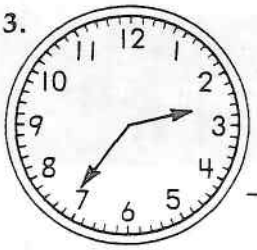
EXTRA PRACTICE

TELLING TIME

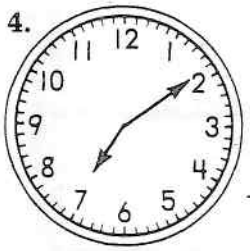
Write the time.

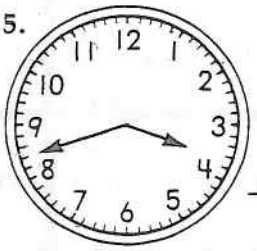
1.  _____

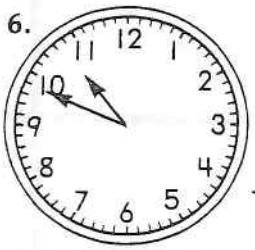
2.  _____

3.  _____

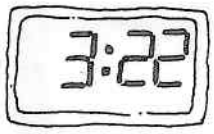
Give the time 1 hour earlier.

4.  _____

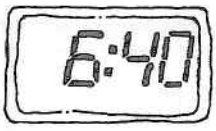
5.  _____

6.  _____

Give the time 1 hour later.

7.  _____

8. _____

9.  _____

Write *A.M.* or *P.M.*

10. Tracy goes to school at 8:15 _____.
11. Lisa's piano lesson is at 3:30 _____.
12. Ken stayed awake until 10:30 _____.
13. The fire whistle woke everyone up at 2:35 _____.
14. 3 hours later than 3 P.M. is 6 _____.
15. 4 hours before 11 P.M. is 7 _____.
16. 2 hours after 12 P.M. is 2 _____.
17. 1 hour after 12 A.M. is 1 _____.
18. 1 hour before 12 P.M. is 11 _____.

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