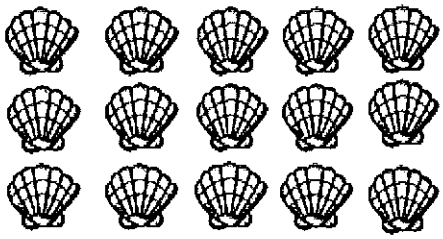
Rising Fourth Grade Math Summer Learning Packet

Name: _____

Name _____

3rd Grade
Summer Math Review
Worksheet A
Operations and Algebraic Thinking:
(Multiplication and Division)

1. Elle collected shells at the beach, and arranged them in an array.



Choose the sentence that describes how the shells are arranged.

A. Elle arranged 5 rows of 3 shells.

B. Elle arranged 15 rows of 15 shells.

C. Elle arranged 3 rows of 15 shells.

D. Elle arranged 3 rows of 5 shells.

2. Andrea works at a sunglasses shop near the beach. To display the sunglasses, she arranges them in the array below.

Which sentence describes how the pairs of sunglasses are arranged?

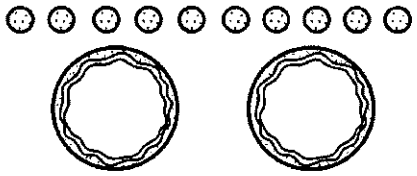
A. 2 rows with 8 pairs of sunglasses per row.

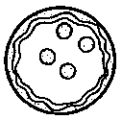
B. 2 rows with 4 pairs of sunglasses per row.

C. 4 rows with 8 pairs of sunglasses per row.

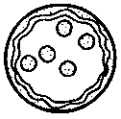
D. 4 rows with 2 pairs of sunglasses per row.

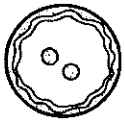
3. Michael is making two pepperoni pizzas. He wants to put the same number of pepperonis on each pizza. Which choice below shows what one of Michael's pizzas will look like once he divides the pepperonis evenly?



A. 

B. 

C. 

D. 

4. David is cooking 32 hot dogs for a picnic.

A. Write one question about the hot dogs that can be answered using division.

_____

_____

B. Answer the question you wrote for Part A:

_____

5. Melanie is making lemonade for her lemonade stand. She needs 6 lemons for each pitcher of lemonade. How many lemons will she need in order to make 7 pitchers of lemonade? Write an equation, and solve it.

_____

6. Jennifer picked 18 roses from her garden. She places the roses evenly into 3 vases. How many roses are in each vase?

_____

Name _____

3rd Grade
Summer Math Review
Worksheet B
Operations and Algebraic Thinking:
(Multiplication and Division, Properties of Multiplication and Division)

1. Sasha works at a pet shelter. A bag of dog food holds 72 cups. She needs to feed 9 dogs. Sasha wrote down the following division problem in order to figure out how many cups of food each dog will receive during its stay.

$$72 \div \square = 9$$

What is the value of the unknown number in Sasha's division problem?

_____

2. James works at a car wash. He washed 28 cars during his 7 hour workday. He wrote down this equation in order to figure out how many cars he washed per hour.

$$28 = \square \times 7$$

What is the value of the unknown number in James' equation?

_____

3. Ava and her family went to a soccer game. There are 4 people total in her family. Each person ate a hot dog and a popcorn. If one hot dog costs $3, and a popcorn costs $2, what was the total cost of food for Ava and her family at the soccer game?

_____

4. Which of the following equations is <u>not</u> true?

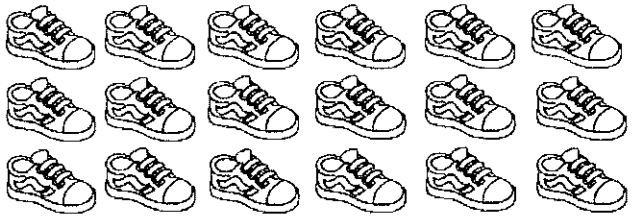
   A. $4 \times 3 \times 1 = 3 \times 1 \times 4$

   B. $3 \times 4 = 3 \times 4 \times 1$

   C. $4 \times 3 \times 1 = 7 \times 1$

   D. $4 \times 3 \times 1 = 12$

5. Choose the multiplication and division equations that match the array below.



A. $18 \times 3 = 54$

B. $6 \times 3 = 18$

C. $18 \div 3 = 6$

D. $54 \div 6 = 18$

6. $6 \times \square = 42$

and

$42 \div 6 = \square$

What is the value of $\square$?

_____

Name _____

3rd Grade
Summer Math Review
Worksheet C
Number and Operations in Base Ten:
(Patterns in Operations, Operation Word Problems)

1. Jill is packing lunch bags to sell at the beach. She plans on making 40 lunches total. She wants each lunch bag to have a container of yogurt. The yogurt is sold in packs of 8. Jill wrote the equation □ x 8 = 40 to figure out how many packs of yogurt she will need to buy in order to make the lunches that she plans on selling. Which two facts can Jill use to help her solve the equation?

   A. 40 ÷ 8 = 5

   B. 8 x 4 = 32

   C. 8 x 5 = 40

   D. 40 + 8 = 48

2. Mitch and Eddie are sharing a bag of potato chips. They counted 24 chips to share equally. Which facts can be used to find the number of chips each boy gets? Choose all that apply.

   A. 3 x 8 = 24

   B. 12 x 2 = 24

   C. 2 x 12 = 24

   D. 24 ÷ 3 = 8

   E. 24 ÷ 2 = 12

3. Michael is spending his summer mowing lawns in order to save money to buy a new bicycle. The bicycle will cost $100. During the month of June, Michael cut six lawns in his neighborhood, and was paid $9 per lawn. How much more money does he need to make in order to buy his new bicycle at the end of the summer?

   _____

4. Olivia is having a lemonade stand in her neighborhood. She needs 6 lemons in order to make one pitcher of lemonade. Olivia has 53 lemons, and wants to make 8 pitchers of lemonade. Does she have enough lemons? Will she have any lemons leftover? If so, how many will she have left?

   _____

5. Mark made the table below showing different ways to get a sum of 50.

Addend	Addend	Sum
10	40	50
20	30	50
30	?	50
40	10	50

   What is the missing addend in Mark's table?

   _____

6. Rick and Jen each counted to 30, by writing numbers down on a list. Jen counted by twos, and Rick counted by fives. Write the numbers that were on both Rick and Jen's lists.

   _____

Name _____

3rd Grade
Summer Math Review
Worksheet D
Number and Operations in Base Ten:
(Use place value understanding and properties of operations to perform multi-digit arithmetic)

1. A farmer at a roadside watermelon stand had a total of 752 pounds of watermelons for sale.

   A. What is 752 rounded to the nearest ten?

   _____

   B. What is 752 rounded to the nearest hundred?

   _____

2. Select all of the numbers listed below that will equal 500 when rounded to the nearest hundred.

   A. 551

   B. 451

   C. 405

   D. 510

   E. 569

3. Josh's soccer team is having a weekend car wash in order to raise money for new uniforms and tournament entry fees. On Saturday, the team washed 277 cars; and on Sunday, the team washed 259 cars. How many cars did the team wash in all?

   _____

4. Desi volunteers at an animal shelter during her summer vacation. She is in charge of feeding the cats each day. The animal shelter receives 800 pounds of cat food per month in donations. During the first week of July, the shelter cats eat 124 pounds of food. How much cat food is left at the end of the first week?

   _____

5. Samantha is buying jumbo packs of juice boxes for the children in her summer camp. The juice boxes come in jumbo packs of 20. If she buys 8 jumbo packs, how many juice boxes will she have purchased?

   _____

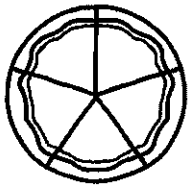
6. James is cooking the hot dogs for the school picnic. The hot dogs come in packs of 8. If he cooks 60 packs, how many hot dogs does he make?

   _____

Name _____

3rd Grade
Summer Math Review
Worksheet E
Number and Operations--Fractions:
(Understanding Fractions as Numbers)

1. A pizza is shown below.



A. How many equal slices (parts) is shown with this pizza?

_____

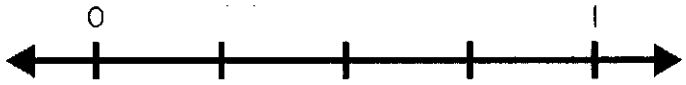
B. If all of the slices of pizza were eaten, write the fraction that names how much of the pizza was eaten.

_____

C. Write the fraction for Part B in words.

_____

3. The number line shown is divided into _____?

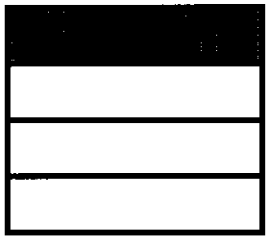


A. Halves
B. Thirds
C. Fourths
D. Fifths

5. Three friends made homemade pizzas. Each pizza was the same size, but each friend cut their pizza into a different number of parts. The table below shows a model of the cut pizza, and the fraction showing how much pizza was eaten by each friend. Which two friends ate the same amount of pizza?

	Friend	Pizza	Part of the Pizza that was Eaten
A.	Allana		$\frac{3}{8}$
B.	Laura		$\frac{2}{6}$
C.	Tyler		$\frac{4}{12}$

2.



A. How many equal parts are shown in this model? _____

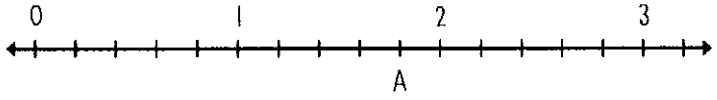
B. How many parts of the model are shaded? _____

C. Write the fraction that names the shaded part of the model. _____

D. Write the fraction in Part C in words.

_____

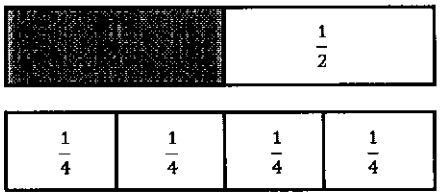
4.



A. How many equal parts are in each section of the number line shown? _____

B. Write the fraction that is at point A. _____

6. Look at the fraction strips below. $\frac{1}{2}$ is shaded on one strip.



A. How many $\frac{1}{4}$ parts would need to be shaded in order to equal $\frac{1}{2}$? _____

B. Write the number of parts as a fraction._____

Name _____

3rd Grade
Summer Math Review
Worksheet F
Number and Operations--Fractions:
(Understanding Fractions as Numbers)

1. Circle all of the fractions that are equivalent to 1.

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

   B. $\frac{6}{6}$

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

   D. $\frac{7}{8}$

   E. $\frac{8}{8}$

2. Rebecca ate $\frac{2}{4}$ of a cherry cheesecake. John ate an equivalent amount of a blueberry cheesecake. Which fractions could show how much cheesecake John ate? Choose all that apply.

   A. $\frac{2}{3}$

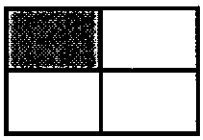
   B. $\frac{1}{4}$

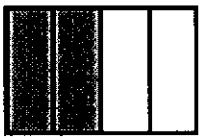
   C. $\frac{3}{6}$

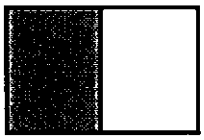
   D. $\frac{1}{2}$

   E. $\frac{5}{8}$

3. Which two models show fractions equivalent to $\frac{1}{4}$?

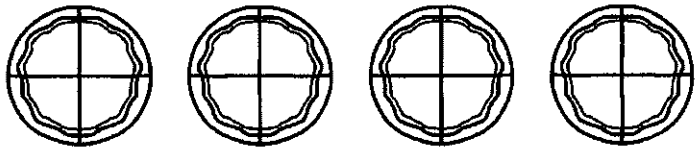
   A. 

   C. 

   B. 

   D. 

4. Use the model below to write a fraction that is equivalent to four pizzas.



_____

5. Kelly and Jordan each planted a garden. Both gardens are the same size. On Saturday, Kelly planted $\frac{1}{3}$ of her garden, and Jordan planted $\frac{1}{2}$ of her garden. If they both plant the remaining part of their gardens on Sunday, who has more garden left to plant? Explain.

_____

_____

_____

_____

6. Compare each pair of fractions using the symbols <, >, or =.

   A. $\frac{2}{6}$ ◯ $\frac{1}{2}$

   B. $\frac{2}{4}$ ◯ $\frac{1}{2}$

   C. $\frac{2}{8}$ ◯ $\frac{1}{4}$

   D. $\frac{1}{3}$ ◯ $\frac{1}{4}$

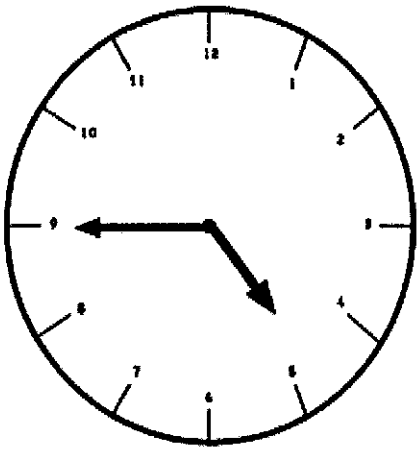
   E. $\frac{3}{4}$ ◯ $\frac{3}{3}$

   F. $\frac{1}{2}$ ◯ $\frac{1}{3}$

Name _____

3rd Grade
Summer Math Review
Worksheet G
Measurement and Data:
(Solve problems involving measurement)

1. Jenny began walking to soccer practice at the time shown on the clock. What is the time shown on the clock?



_____

2. Sam uses a container to fill his fish tank with water. The container can hold 4 Liters of water. If he fills the container nine times in order to completely fill his fish tank, then how many Liters of water does his fish tank hold?

_____ Liters of water

3. The table below shows four third grade students that participated in a summer reading challenge at their school, and the number of books they each read.

Books Read during Summer Vacation	
Jack	
Colby	
Sarah	
Eleanor	

Key: Each  stands for 3 books

A. How many more books did Sarah read than Jack?_____

B. How many books did the two highest readers read in all?_____

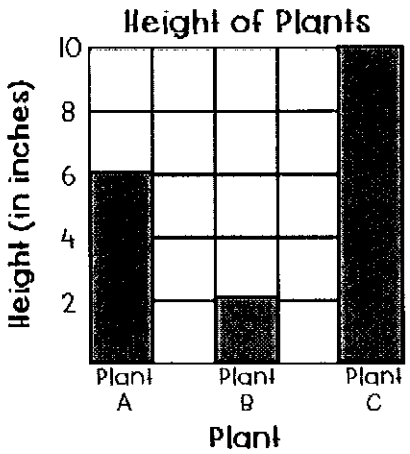
4. Anthony went to the library. He arrived at 6:13 p.m. He left the library at 6:47 p.m. How many minutes did he spend at the library?

_____ minutes

5. Elijah buys 5 watermelons to cut and serve at a picnic. If each watermelon has a mass of 4 kilograms, then what is the total mass of the watermelon that Elijah has?

_____ kilograms of watermelon

6. Jessie planted a garden, and wanted to see how quickly each of her plants grew. After one month, she measured the height of each plant, and made the graph below.



A. What is the difference in height between the tallest plant and the shortest plant?

_____ inches

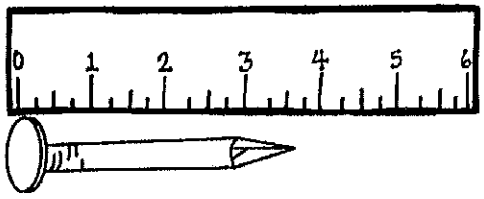
B. What is the total height of all three plants combined?

_____ inches

Name _____

3rd Grade
Summer Math Review
Worksheet H
Measurement and Data:
(Represent and Interpret Data)

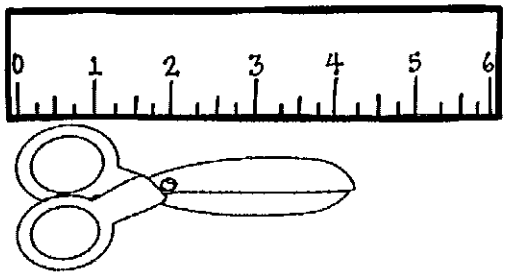
1. John and is father are building a tree house. This ruler shows the length of the nails they used to build the tree house.



A. How long are the nails to the nearest inch?
_____ inches

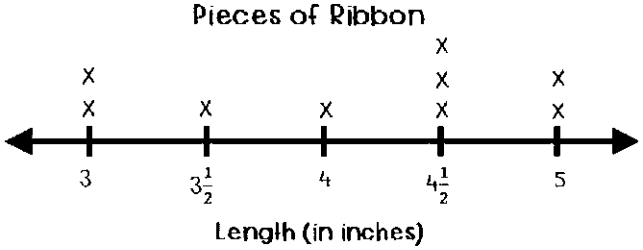
B. How long are the nails to the nearest half inch? _____ inches

2. A pair of scissors is shown. What is the length of the scissors to the nearest whole inch?



_____ inches

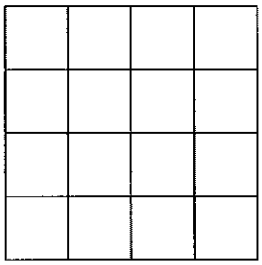
3. Mary needs pieces of ribbon that are at least 4 inches long for a project. She measured all of her pieces of ribbon, and made a line plot of her data.



How many pieces of Mary's ribbon are at least 4 inches, or longer?

_____ pieces of ribbon

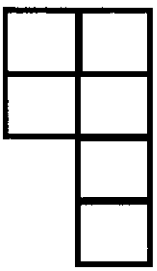
4. A figure is shown. One square unit has an area of 1 square centimeter.



What is the area of the whole figure in square centimeters?

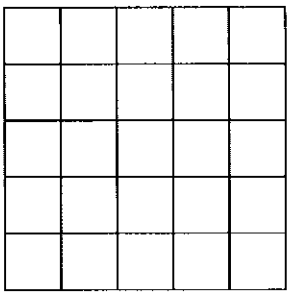
_____ square centimeters

5. Count the square units to find the area of the figure.



_____ square units

6. Count the square units to find the area of the figure.



_____ square units

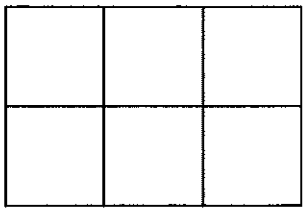
Name _____

3rd Grade
Summer Math Review
Worksheet 1
Measurement and Data:
(Concepts of Area)

1. Jeanette is planting a rectangular garden in her backyard. The space where she wants to put the garden measures 9 feet by 6 feet. How many square feet of her yard will her garden take up?

_____ square feet

2. In the rectangle below, the area of one  is 1 square centimeter.

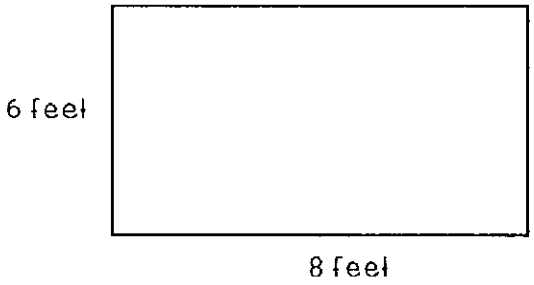


A. What is the length of the rectangle shown above? _____

B. What is the width of the rectangle shown above? _____

C. What is the area of the rectangle shown above? _____

3. Cindy went to beach. She laid out a large rectangular blanket. The blanket is in the shape of the rectangle shown. What is the area, in square feet, of the blanket?

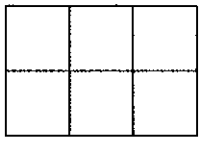


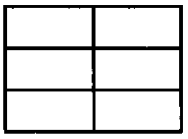
_____ square feet

4. Select all of the rectangles that have an area of 6 square centimeters.

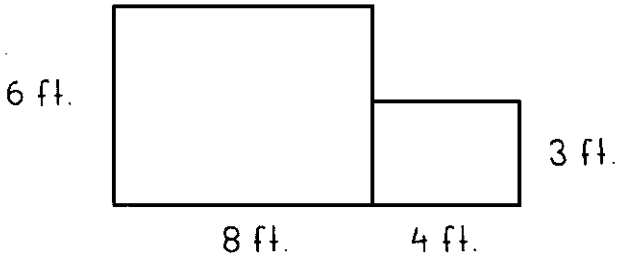
A. 

C. 

B. 

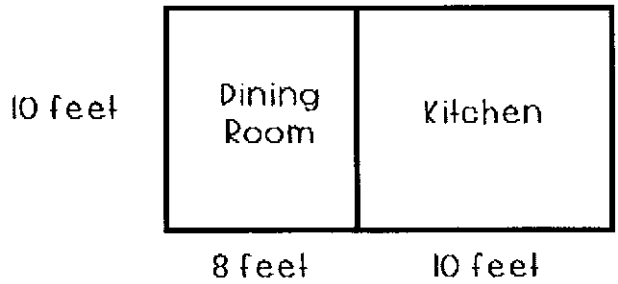
D. 

5. What is the area of the figure below?



_____ square feet

6. Mike is tiling his kitchen and dining room. He drew the model below of the space.



How many 1 foot square tiles will he need to buy to tile his kitchen and dining room?

_____ tiles

Name _____

3rd Grade
Summer Math Review
Worksheet J
Measurement and Data and Geometry:
Perimeter, Area,

1. Davis has a rectangular patio with a length of 7 feet, and a width of 8 feet.

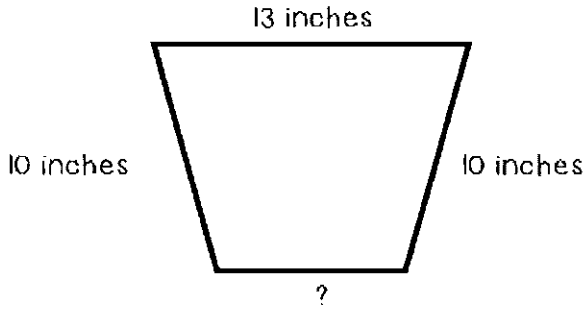
   A. What is the perimeter of Davis' patio?

   _____

   B. What is the area of Davis' patio?

   _____

2. The perimeter of the figure below is 40 inches.



What is the length of the unknown side?

_____

3. A rhombus and a trapezoid are shown. What attribute do these shapes always have in common?

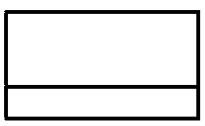
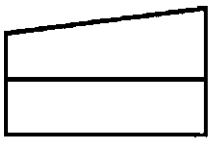
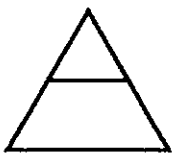
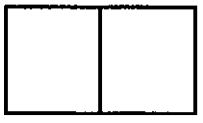
   A. They have are quadrilaterals
   B. They have 4 equal sides
   C. They have 4 right angles
   D. They have 2 pairs of parallel sides

4. Choose the figure that always has the following attributes:

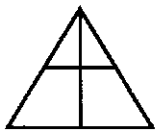
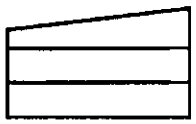
   ✓ Is a quadrilateral
   ✓ Has four right angles
   ✓ Has four sides of equal length
   ✓ Has two pairs of parallel sides

   A. A rectangle
   B. A square
   C. A rhombus
   D. A parallelogram

5. Which figure is divided into two equal parts, and each part can be expressed as ½ of the figure?

   A. 
   C. 
   B. 
   D. 

6. Which figure is divided into four equal parts, and each part can be expressed as ¼ of the figure?

   A. 
   C. 
   B. 
   D.