

Dear Parents and Students,

We are excited about our new third graders! We are so excited that we have prepared some summer work to help get you started. To be successful in third grade it is important that you memorize your multiplication facts and read daily. We have also attached some websites that can help you understand some of the third grade math strategies as well as some printable work. We hope you have a great summer! Keep reading and learning those math facts!

Sincerely,

RRE Third Grade Teachers

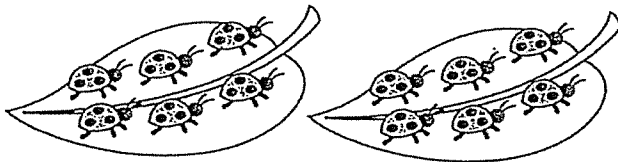
### 3<sup>rd</sup> grade Math websites

- [https://www.mathplayground.com/grade\\_3\\_games.html](https://www.mathplayground.com/grade_3_games.html)
- <https://www.mobymax.com/signin>
- <https://www.splashmath.com/math-games-for-3rd-graders>
- [https://www.adaptedmind.com/Math-Worksheets.html?campaignId=770019790&gclid=EAlaIQobChMIv8eF4uav4gIVew-BCh048g-gEAEYASAAEgKhePD BwE&utm\\_expid=33853517-85.i0lgyPP0Rbe\\_7V8bkpr1zQ.0](https://www.adaptedmind.com/Math-Worksheets.html?campaignId=770019790&gclid=EAlaIQobChMIv8eF4uav4gIVew-BCh048g-gEAEYASAAEgKhePD BwE&utm_expid=33853517-85.i0lgyPP0Rbe_7V8bkpr1zQ.0)
- <https://www.khanacademy.org/math/cc-third-grade-math>
- <http://www.mathgametime.com/grade/3rd-grade>
- <https://www.multiplication.com/games/all-games>

Study the example problem showing a multiplication sentence to represent equal groups. Then solve problems 1–9.

**Example**

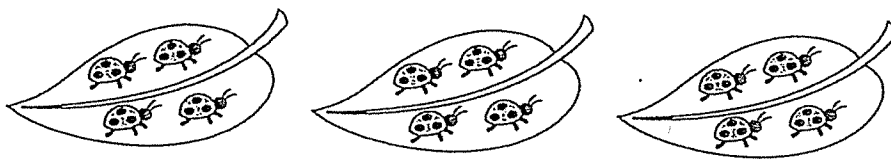
There are 2 leaves. There are 6 ladybugs on each leaf. How many ladybugs are there altogether? Write a multiplication sentence.



There are 2 equal groups of ladybugs. Each group has 6 ladybugs.

Multiplication sentence:  $2 \times 6 = 12$

Use the picture below to answer problems 1–4.



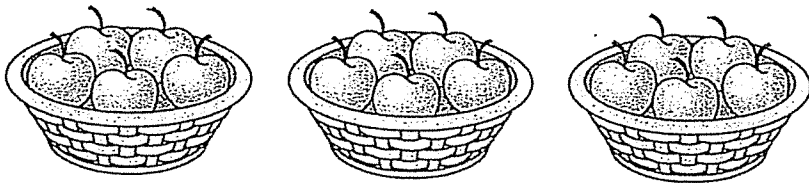
- 1 How many equal groups are there? \_\_\_\_\_
- 2 How many ladybugs are in each group? \_\_\_\_\_
- 3 How many ladybugs are there altogether? \_\_\_\_\_
- 4 Write a multiplication sentence about the number of ladybugs.

\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

Study the example problem with a division sentence that represents equal groups. Then solve problems 1–8.

**Example**

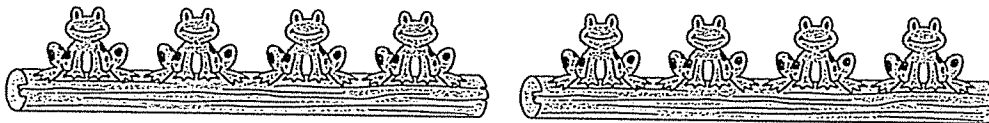
Emily picks 15 apples from her tree. She has 3 baskets. She puts an equal number of apples in each basket. How many apples does Emily put in each basket?



There are 15 apples in 3 baskets. Each basket has 5 apples.

$$15 \div 3 = 5$$

Use the picture of frogs on logs to answer problems 1–4.



- 1 How many frogs are there in all? \_\_\_\_\_
- 2 How many logs are there? \_\_\_\_\_
- 3 How many frogs are on each log? \_\_\_\_\_
- 4 Write a division sentence about the 8 frogs in 2 equal groups.

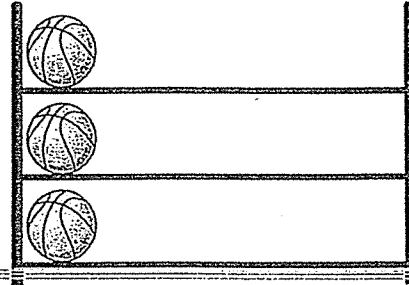
$$\underline{\hspace{1cm}} \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

If I put 8 frogs onto 4 logs, could I make equal groups?



**Solve.**

- 5 The basketball cart has 3 shelves. Each shelf can hold 5 basketballs. There is already 1 basketball on each shelf. Draw the rest of the basketballs to fill the cart.



- 6 Look at your picture of the basketballs on the cart. Think about the basketballs as an array.

How many rows are in the array? \_\_\_\_\_

How many basketballs are in each row? \_\_\_\_\_

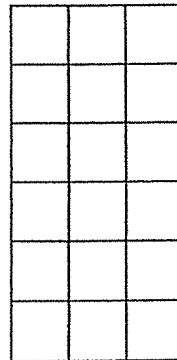
How many basketballs are on the cart? \_\_\_\_\_

- 7 Fill in the blanks to represent the array of basketballs with a multiplication sentence.

\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

- 8 Write the multiplication sentence to represent the squares in the rectangle.


\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_



- 9 Draw an array of square tiles to show  $4 \times 6 = 24$ .

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**Solve.**


-  A camp needs 100 students to help with the 4-year old campers. Eight students from 4 different classes have agreed to help. How many more students are needed?

**Show your work.**

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*Solution:* \_\_\_\_\_

-  The music teacher had \$75. He bought 4 folk song books for \$9 each. Does he have enough money to buy a music stand for \$49? If not, how much more money does he need?

**Show your work.**

*Solution:* \_\_\_\_\_

-  Mr. Berg bought 5 number puzzles and 3 word puzzles for his students. The puzzles were \$7 each. Mr. Berg used a \$60 gift card to pay for the puzzles. How much change did he get?

**Show your work.**

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*Solution:* \_\_\_\_\_

# Rounding


Solve.

- 4 To earn money, you brush dogs. You are so busy that you hire your friends to help. You pay your friends \$1 for each dog they brush. You only have \$10 bills to pay them with. You must round each payment to the nearest ten. Show how much each friend gets paid.


Friend	Number of Dogs Brushed	Payment to the Nearest \$10
Jessica	12	\$ _____
Sophie	18	\$ _____
Mia	22	\$ _____

- 5 a. The number 767 is between what two tens?  
\_\_\_\_\_ and \_\_\_\_\_
- b. What number is halfway between these two tens? \_\_\_\_\_
- c. Is 767 less than or greater than the halfway number? \_\_\_\_\_
- d. Will it round up or down? \_\_\_\_\_
- e. What is 767 rounded to the nearest ten? \_\_\_\_\_
- 6 a. The number 342 is between what two tens?  
\_\_\_\_\_ and \_\_\_\_\_
- b. Will it round up or down? \_\_\_\_\_
- c. What is 342 rounded to the nearest ten? \_\_\_\_\_
- 7 What is a number less than 930 that rounds to 930?  
\_\_\_\_\_
- 8 What is a number greater than 930 that rounds to 930? \_\_\_\_\_


**Solve.**

 Answer the questions below to round 377 to the nearest hundred.

- a. The number 377 is between what two hundreds? \_\_\_\_\_ and \_\_\_\_\_
- b. What number is halfway between these two hundreds? \_\_\_\_\_
- c. Is 377 less than or greater than the halfway number? \_\_\_\_\_
- d. Will you round up or down? \_\_\_\_\_
- e. What is 377 rounded to the nearest hundred? \_\_\_\_\_

 The chart below shows the miles between U.S. cities. Round each distance to the nearest hundred miles.


Cities	Distance in Miles	Distance to the Nearest Hundred Miles
Phoenix and Las Vegas	292	_____
Los Angeles and San Francisco	386	_____

 Can you solve this riddle about a number? Here are the clues.

- The number is between the two hundreds, 500 and 600.
- The number is greater than the halfway number.
- You will round up to round this number to the nearest hundred.

What is the number? Circle the correct answer.

525      575      501      650

 What is 999 rounded to the nearest hundred? \_\_\_\_\_

2 - Step  
word problems

Solve.

- 3 Packages of party napkins are \$4 each. Bags of party cups are \$6 each. Mrs. Laurey bought 2 packages of party napkins and 1 package of party cups. How much did she spend in all?

Write number sentences, then write the solution.

Number sentences: \_\_\_\_\_

Solution: She spent \$ \_\_\_\_\_.

- 4 The gift shop sells red and white paper plates. They have 20 packs of red plates and 28 packs of white plates. All packs of plates are on 6 shelves with the same number of packs on each shelf. How many packs of plates are on each shelf?

**Show your work.**

Solution: There are \_\_\_\_\_ packs on each shelf.

- 5 Large tablecloths are \$12 each. Small ones are \$8 each. How many small tablecloths can you buy for the same price as two large tablecloths?

**Show your work.**

Solution: You can buy \_\_\_\_\_ small tablecloths.



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**Solve.**

- 5 A class has 20 students. The teacher divides them into teams of 4 students. How many teams are there? Draw a picture.

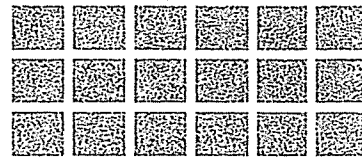
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*Solution:* \_\_\_\_\_

- 6 Parker said that the array of 18 rectangles shows the division problem  $6 \div 3$ . What is her mistake?



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- 7 Evan has 30 trading cards. He puts them in stacks that each have 5 cards. Write a division sentence to find the number of stacks.

\_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

- 8 Explain what each number in your division sentence from problem 7 represents.

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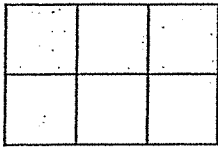
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Study the example that shows how to write a fraction for parts of a whole. Then solve problems 1–8.

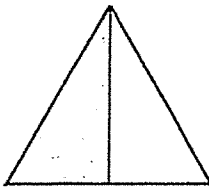
### Example



- There are 6 equal parts.
- Each part is one sixth.
- 5 parts are shaded.
- 5 sixths of the whole is shaded.
- This shows the fraction  $\frac{5}{6}$ .

Fill in the blanks.

1

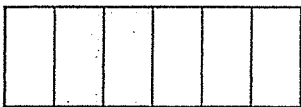


\_\_\_\_\_ shaded parts

\_\_\_\_\_ equal parts

\_\_\_\_\_ fraction

2



\_\_\_\_\_ shaded parts

\_\_\_\_\_ equal parts

\_\_\_\_\_ fraction


### Vocabulary


**fraction** a number that names part of a whole.

Use the table and pictograph to solve problems 4–8.

Pablo asked some students which sport they like best. He recorded the data in this table. Then he started to make a pictograph.

Sport	Number of Students
Baseball	14
Basketball	10
Biking	16
Skating	12
Soccer	18

Baseball	
Basketball	
Biking	
Skating	
Soccer	

Each  stands for \_\_\_\_\_ students.

4 What scale is Pablo using for his graph? Tell how you know. Then fill in the key.

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5 How many symbols do you need to show the number of students who like soccer? Why?

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6 Which sport will have 5 symbols on the pictograph? Explain.

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7 What is a good title for Pablo's graph? Write it above the graph.

8 Complete the pictograph.

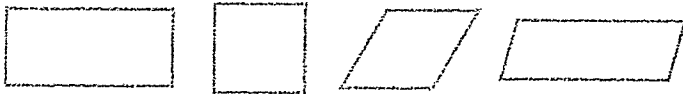
**Vocabulary**

**pictograph** a graph using pictures or symbols to show data.

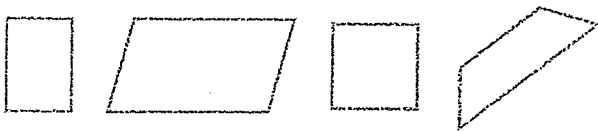
Solve. Use the table to solve problems 4–7.

Attribute	Parallelogram	Rhombus	Rectangle	Square
4 sides 4 angles	yes	yes	yes	yes
4 square corners	sometimes	sometimes	yes	yes
2 pairs of parallel sides	yes	yes	yes	yes
2 pairs of sides that are the same length	yes	yes	yes	yes

Circle all the quadrilaterals that are rhombuses.



Circle all the quadrilaterals that are rectangles.



Tell whether each sentence is *True* or *False*.

- All squares are rectangles.  True  False
- All rectangles are parallelograms.  True  False
- All parallelograms are rectangles.  True  False
- All quadrilaterals are parallelograms.  True  False
- All parallelograms are quadrilaterals.  True  False

Jaime says that some rectangles are not squares. Do you agree? Explain.

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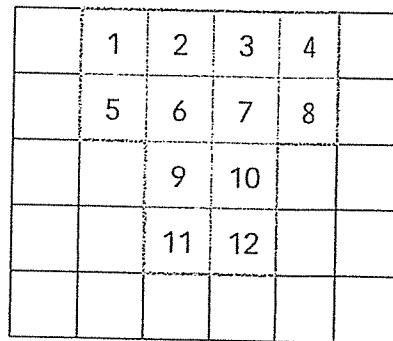
Name: \_\_\_\_\_


Study the example showing how to count square units to find area. Then solve problems 1–7.


**Example**

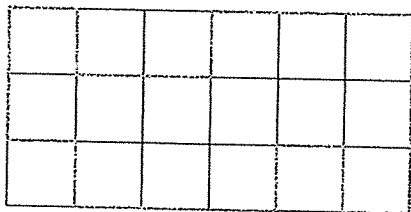
The red shape is covered with squares the same size.  
What is the area of this shape?

Count the square units. The area of the shape is 12 square units. You must use same-size squares to find the area in square units.

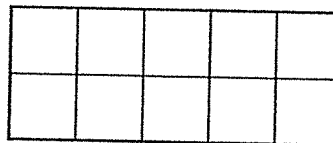


 = 1 square unit


 Count to find each area.

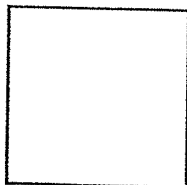


Area = \_\_\_\_\_ square units

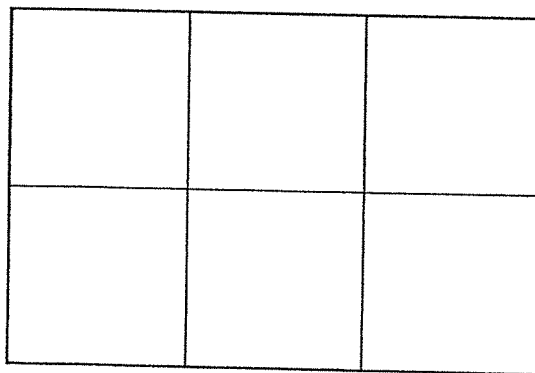


Area = \_\_\_\_\_ square units


 What is the area?



1 square inch



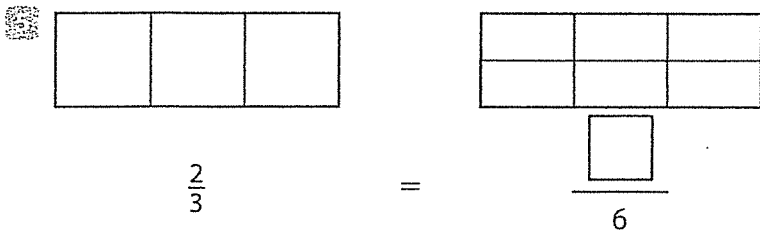
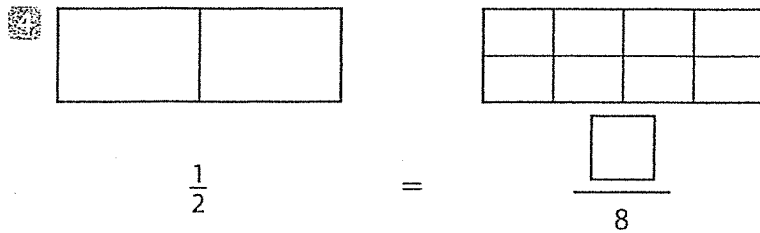
Area = \_\_\_\_\_ square inches

  
**Vocabulary**

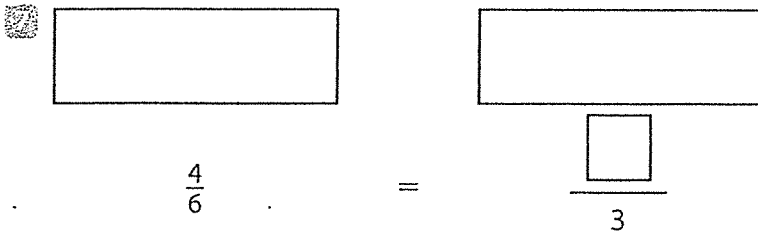
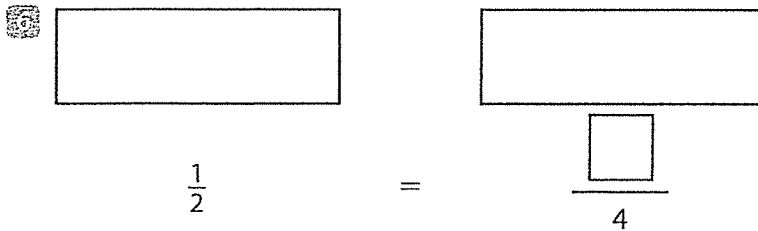
**area** the amount of space a shape covers.

**square unit** a square with side lengths of 1 unit that is used to measure the area of a figure.

Shade the bars to show equivalent fractions. Then fill in the blanks to write equivalent fractions.



Draw lines and shade to show equivalent fractions. Then fill in the blanks to write equivalent fractions.



What is a fraction equivalent to  $\frac{4}{4}$ ? Explain how you know.

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**Solve.**

 A movie starts at 5:15. Rudy wants to get to the theater 25 minutes before the movie starts. It takes 10 minutes to drive to the theater. What time should Rudy leave home?


**Show your work.**

*Solution:* \_\_\_\_\_

 Carlos played on the playground for 12 minutes. Then he swam at the pool for 25 minutes. He finished at 12:00. What time did he start playing?

**Show your work.**

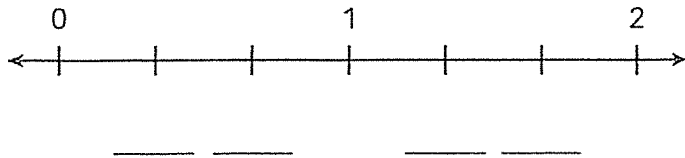
*Solution:* \_\_\_\_\_

 Allie was done with gymnastics practice at 7:30. At practice, she tumbled for 20 minutes. Then she worked on the balance beam for 10 minutes. Allie also practiced on the trampoline for 15 minutes. What time did she start practice?

**Show your work.**

*Solution:* \_\_\_\_\_

Use this number line to answer problems 5–8.



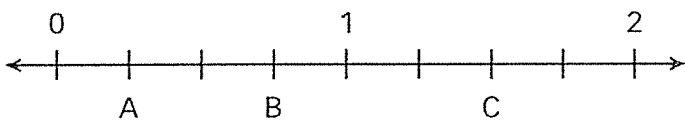
How many equal parts are between 0 and 1? \_\_\_\_\_

How many equal parts are between 1 and 2? \_\_\_\_\_

What fraction does each part show? \_\_\_\_\_

Write fractions to label the marks.

Use this number line to answer problems 9–11.

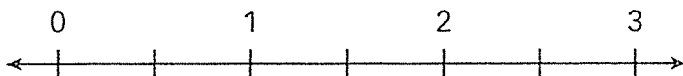


A is \_\_\_\_\_.

B is \_\_\_\_\_.

C is \_\_\_\_\_.

Write the fraction  $\frac{3}{2}$  where it belongs on this number line.



Explain how you knew where to put  $\frac{3}{2}$ .

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