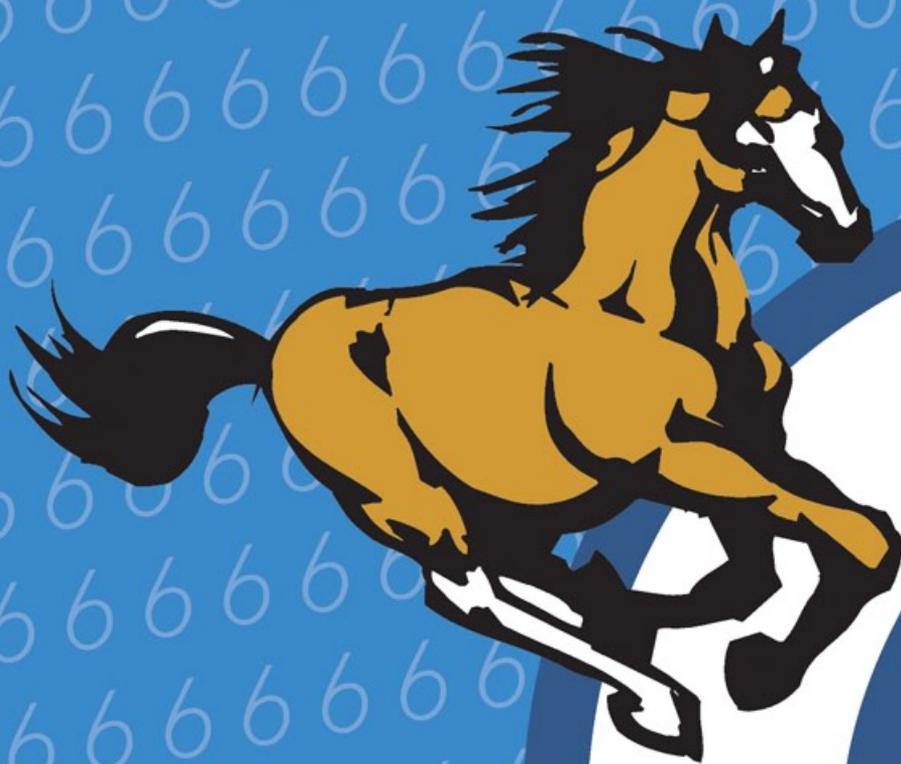


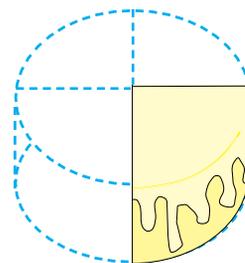
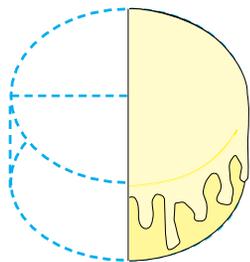
# Horizons

## Math



## Multiplying Fractions

Michael had  $\frac{1}{2}$  a cake to share among his friends. They ate  $\frac{1}{2}$  of the remaining cake. What part of the whole cake did Michael and his friends eat?



They ate  $\frac{1}{4}$  of the entire cake.

We want to find  $\frac{1}{2}$  of  $\frac{1}{2}$ , so we multiply.

Multiply the numerators.

$$\frac{1}{2} \times \frac{1}{2} = \frac{1}{?}$$

**STEP 1:**

**STEP 2:**

Multiply the denominators.

$$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$$



**1** **Multiply.** Reduce to the lowest terms.

$$\frac{7}{8} \times \frac{1}{8} =$$

$$\frac{4}{5} \times \frac{1}{2} =$$

$$\frac{1}{9} \times \frac{2}{5} =$$

$$\frac{3}{7} \times \frac{1}{4} =$$

$$\frac{4}{6} \times \frac{1}{3} =$$

$$\frac{1}{3} \times \frac{4}{12} =$$

$$\frac{7}{15} \times \frac{1}{2} =$$

$$\frac{3}{8} \times \frac{9}{10} =$$



**2****Solve.**

The Bearley's need 1,290 tiles to cover a floor and a splash area. The tiles are sold in boxes of 25 tiles each. How many boxes should they buy?

Coach Brian needs has 229 players in his T-Ball league. Each player is to be given a Loganville T-Ball League patch. If the patches come in packages of 15, how may packages does Coach Brian need to buy?

Latrobe First Baptist needs to mail 8 boxes of supplies to their missionaries in Africa. If the church has \$425 to spend on shipping, and each box will cost approximately \$65, how many of the 8 boxes can they ship with \$425?

Each cabin at Youth Camp houses 12 students. If there are 69 girls going to camp and 43 boys going to camp, how many cabins will be needed for all the students? (Remember, girls and boys cannot share a cabin).

**3****Find the quotient.**

$0.5 \overline{)3.20}$

$.82 \overline{)2.952}$

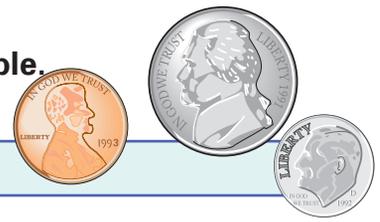
$62.5 \overline{)4.3125}$

$3.8 \overline{)2.1280}$

**4****Convert the following numbers from base 2 into base 10.**

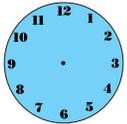
$2^4$	$2^3$	$2^2$	$2^1$	$2^0 = 1$
1	1	0	1	1 =
	1	1	1	1 =
	1	0	0	1 =
			1	1 =
1	0	1	1	0 =
1	1	1	1	1 =

- 5 **Count the change. Use the fewest coins and bills possible.**  
Write the total amount due.



Price	Paid	Change Due
Example: \$1.55	\$5.00	3 dollars, 2 dimes, 1 quarter = \$3.45
\$3.14	\$5.00	
\$8.29	\$10.00	
\$12.30	\$15.00	
\$38.75	\$40.00	
\$12.19	\$20.00	

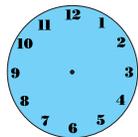
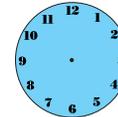
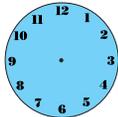
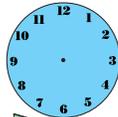
- 6 **Label each time zone. Draw the correct time on the clock face in each time zone.**



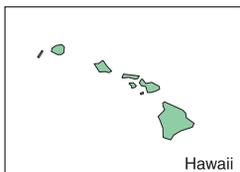
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\_\_\_\_\_



\_\_\_\_\_



## Multiply a Fraction by a Whole Number

Clara collected data about the 15 children in her preschool class. She discovered that  $\frac{3}{5}$  of the children have a pet at home. How many children in the class have a pet?

To find the fraction of a number we multiply:

What is  $\frac{3}{5}$  of 15?

OR

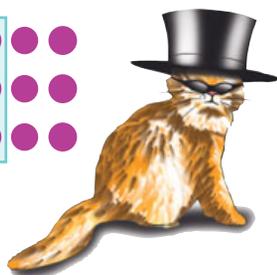
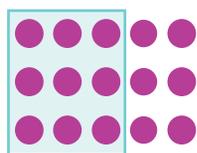
$\frac{3}{5}$  of 15 =

When you see the word “of” in a mathematical equation, it means to multiply. Rewrite the equation and substitute a multiplication sign where the word “of” is written.

$$\frac{3}{5} \text{ of } 15 = 9$$

OR

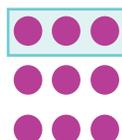
$$\frac{3}{5} \times \frac{15}{1} = \frac{45}{5} = 9$$



9 of the students in Clara’s class have pets.

Clara also discovered  $\frac{1}{3}$  of the students with pets have cats as pets.

How many students have cats?



$$\frac{1}{3} \text{ of } 9 = 3$$

OR

$$\frac{1}{3} \times \frac{9}{1} = 3$$

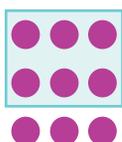
**1** Find the fraction of each number. Draw pictures if necessary.

$$\frac{1}{2} \text{ of } 16$$

$$\frac{1}{4} \text{ of } 12$$

$$\frac{1}{4} \text{ of } 20$$

$$\frac{2}{3} \text{ of } 9$$



$$\frac{1}{10} \text{ of } 50$$

$$\frac{2}{3} \text{ of } 24$$

2

**Multiply.** Rename to lowest terms.

$$\frac{23}{25} \times \frac{2}{10} =$$

$$\frac{9}{18} \times \frac{4}{8} =$$

$$\frac{7}{20} \times \frac{5}{8} =$$

$$\frac{56}{90} \times \frac{45}{50} =$$

$$\frac{6}{8} \times \frac{2}{3} =$$

$$\frac{15}{16} \times \frac{4}{3} =$$



3

**Solve.**

The caterer made 250 mini quiches for the preschool brunch. If each person will eat 3 quiches, how many people will be fed?

A giant watermelon, weighing 30 pounds was cut into 20 equal slices. How much did each slice weigh?

How many boards 48 inches long can be cut from a board 168 inches long?

In your monthly budget you have allowed \$175 for gasoline. If it takes approximately \$21 to fill up your tank, how many times can you fill up in a month?

4

**Divide.**

$$2.095 \div 5 =$$

$$18.78 \div 6 =$$

$$17.334 \div .54 =$$

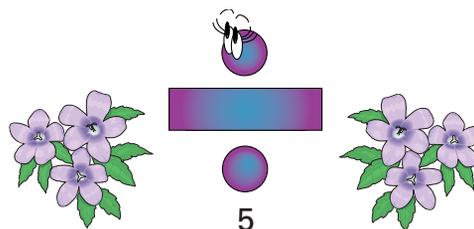
$$28.35 \div 5 =$$

$$482.4 \div 4.02 =$$

$$.0072 \div 8 =$$

$$.658 \div 7 =$$

$$9.54 \div 6 =$$



5 Convert each base 10 number to its base 2 equivalent.

56 =

63 =

9 =

23 =



6 Round each number to the nearest hundredth in order to find your path through the maze.

10.239 = \_\_\_\_\_

56.982 = \_\_\_\_\_

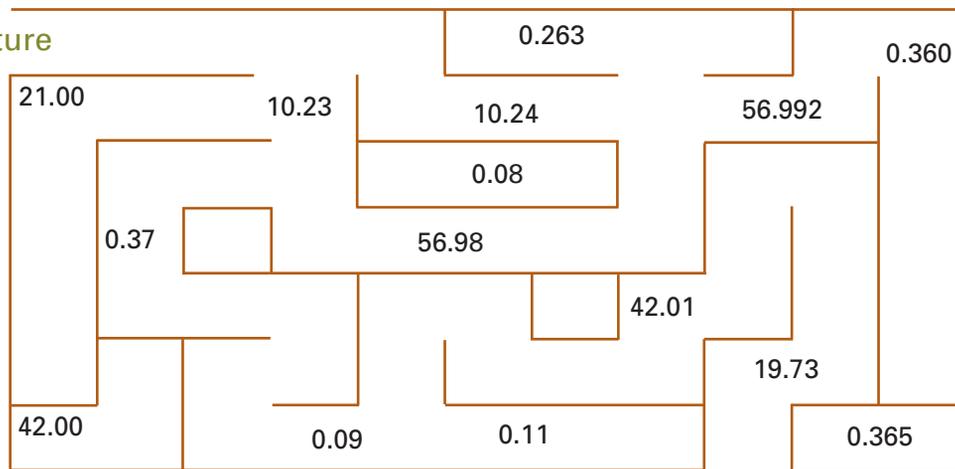
0.367 = \_\_\_\_\_

0.085 = \_\_\_\_\_

42.006 = \_\_\_\_\_

19.732 = \_\_\_\_\_

Sinful Nature



Righteousness

7 Write the amount of change due from each transaction. Use the fewest coins and bills possible.

Eileen purchased a set of tires for her car at a cost of \$397.65. If she gave the cashier \$500.00, how much change is she due?

Mr. Tomko used \$295.00 to purchase a miter saw and \$58.95 to purchase a new drill. How much change will he receive if he gives the cashier four one hundred dollar bills?

Kathy purchased a CD player. She paid the cashier with a \$100.00 dollar bill. If she received a ten dollar bill and a quarter in change, how much did the CD player cost?

Mrs. Ross spent \$146.25 at the grocery store. She then spent \$35.65 at the grocery store's pharmacy. If she left the house with 3 one hundred dollar bills, how much cash does she now have? List what bills she has in her wallet if the cashier gave her the correct change.