

Suggested Math Plans
April 27- May 1

This week will focus on multiplication and division review and practice. We will focus on the relationship between the two, as well as strategies to solve for multiplication and division.

On page 12 below, there is a calendar of fun/interesting math activities for each school day for the remainder of the year. **Parents should keep this calendar as it will not be printed on future guides.**

Standards:

Standard 3.OA.A.3 Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as $3 \times ? = 24$, $6 \times 16 = ?$, $? \div 8 = 3$, or $96 \div 6 = ?$)

Standard 3.OA.B.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known (Commutative property of multiplication). $3 \times 5 \times 2$ can be solved by $(3 \times 5) \times 2$ or $3 \times (5 \times 2)$ (Associative property of multiplication). One way to find 8×7 is by using $8 \times (5 + 2) = (8 \times 5) + (8 \times 2)$. By knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, then $8 \times 7 = 40 + 16 = 56$ (Distributive property of multiplication over addition).

Day 1	<p>Today's focus:</p> <p>Today's focus is on the meaning of multiplication represented as equal groups and arrays/area models.</p> <ul style="list-style-type: none">○ Do at least 15 minutes of iReady○ Complete today's calendar challenge○ Watch "Multiplying With Arrays" on Flocabulary and take the quiz!○ Day One Task: Stamp Challenges○ Multiplication Game<ul style="list-style-type: none">○ https://www.abcya.com/games/multiplication_mine_jr
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Day 2	<p>Today's focus:</p> <p>Today's focus is on the distributive property. Students will explore decomposing rectangles into known facts to make the problem easier. Recording partial products and equations will be essential on this task</p> <ul style="list-style-type: none"> ○ Do at least 15 minutes of iReady <ul style="list-style-type: none"> ○ It would be very helpful to complete the assigned iReady lesson (Break Apart a Number to Multiply) first. ○ Complete today's calendar challenge ○ Watch "Distributive Property" on Brainpop ○ Day Two Task: Jack's Rectangles ○ Practice your fact fluency using IXL, Xtra math, Mobymax, or flash cards!
Day 3	<p>Today's Focus:</p> <p>Today's focus is on identifying what part is unknown, number of groups or size of the group, in a contextual problem. This will lead to understanding division as an unknown factor problem.</p> <ul style="list-style-type: none"> ○ Do at least 15 minutes of iReady ○ Complete today's calendar challenge ○ Watch "Divisibility Rules" on Flocabulary and take the quiz! ○ Day 3 Task: Identify the Unknown ○ Multiply or Divide? Task Cards
Day 4	<p>Today's Focus:</p> <p>Today's focus is on identifying the group size or number of groups as the missing part then connecting the multiplication with an unknown factor to division in a contextual problem</p> <ul style="list-style-type: none"> ○ Do at least 15 minutes of iReady ○ Complete today's calendar challenge ○ Day 4 Task: Connecting Multiplication and Division: Number of Groups or Group Size? ○ Fact Family Arrays ○ IXL Lesson: N.10- Relate Multiplication and Division

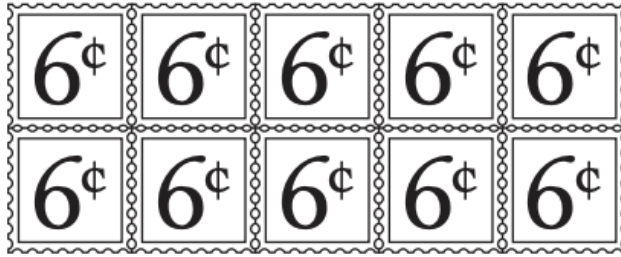
Day 5	<p>Today's Focus: Today's focus is practicing division with a game. Students should be encouraged to also state the related multiplication fact for each division fact they draw.</p> <ul style="list-style-type: none"> ○ Do at least 15 minutes of iReady ○ Complete today's calendar challenge ○ IXL Lessons: <ul style="list-style-type: none"> ○ M.5- Multiplication and Division Sentences up to 12: true or false? ○ M.6- Multiplication and Division Sentences up to 12: true or false? ○ Follow Along & Related Facts Pages
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Bonus Activities!

- iReady: Break Apart a Number to Multiply
- Continue working on iReady at home packet
- Continue practicing fact fluency via IXL, Xtra math, Mobymax, or flash cards! This will be a BIG help if they know their math facts going into fourth grade!!
- Online Multiplication Games
 - <https://mrnussbaum.com/becoming-lord-voldemath-online-game>
 - <https://www.multiplication.com/games/play/car-rush-multiplication>
 - <https://www.multiplication.com/games/play/multiplication-4-row>
- Division: True or False?

Day 1: Stamp Challenge

A. How many stamps do you see? What is the total cost of the stamps?



B. Stevie has 4 cards with 8 stamps on each card. Cindy has 8 cards with 4 stamps on each card. Who has more stamps, Stevie or Cindy?

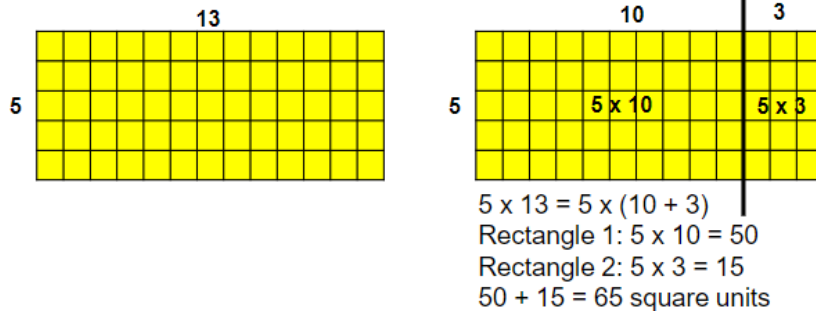
Day 2: Jack's Rectangles

Jack's Rectangles

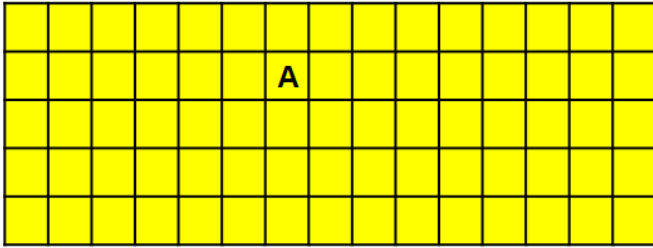
Materials: pack of rectangles composed of unit squares



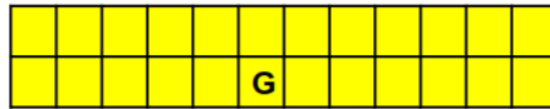
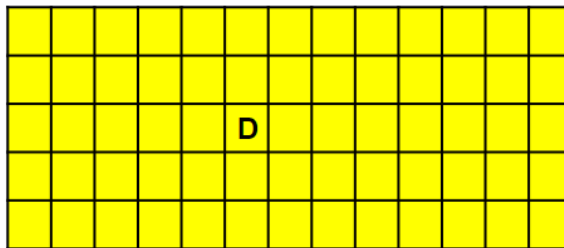
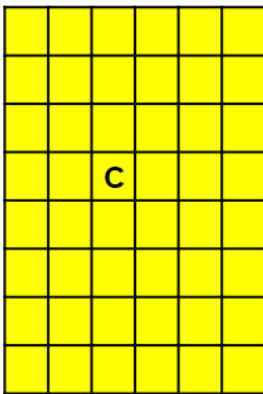
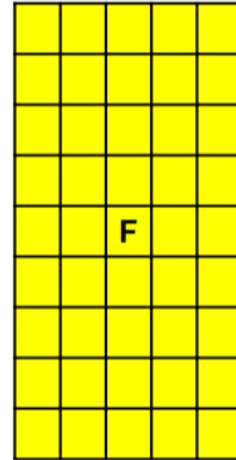
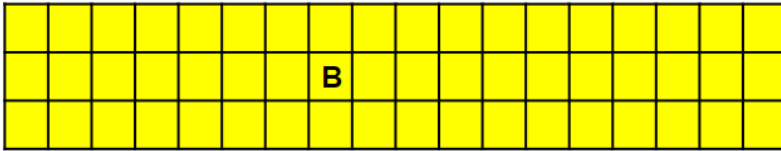
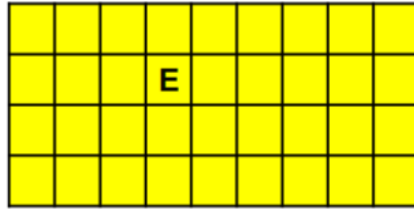
Jack needed to find the area of a rectangle that was 5 square units by 13 square units. He decided to use the distributive property to break the rectangle into smaller rectangles, and add the area of each smaller rectangle to find the total area.



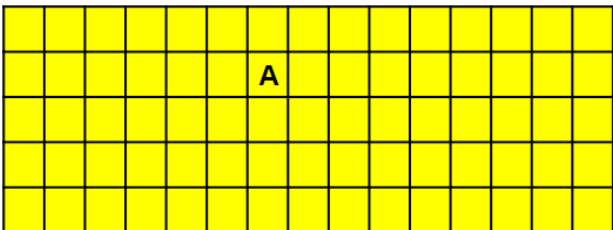
1. Use the distributive property to find the area of the rectangles in the pack. Show your multiplication and addition equations.
2. Share your work with a classmate. Did you break apart the rectangles in the same way? Explain.



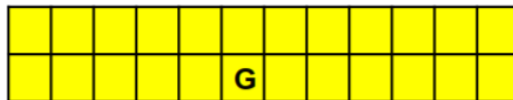
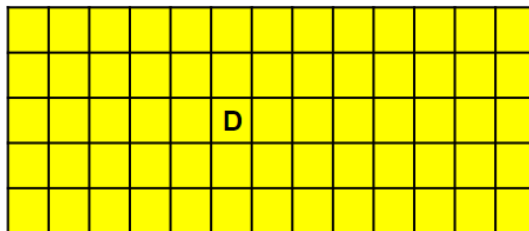
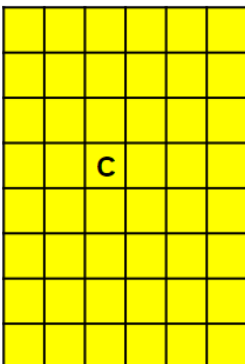
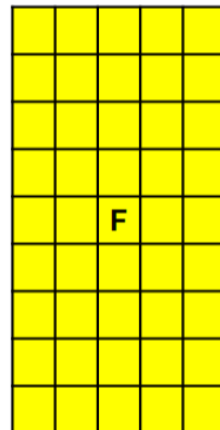
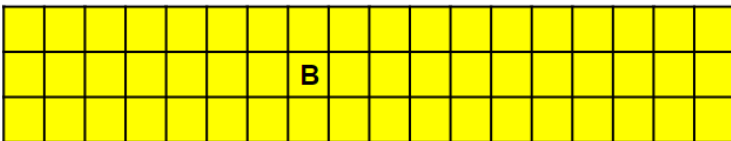
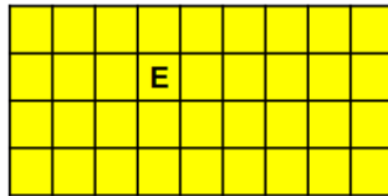
Rectangle Pack: Copy on cardstock and cut out rectangles for use in center.



©K-5MathTeachingResources.com



Rectangle Pack: Copy on cardstock and cut out rectangles for use in center.

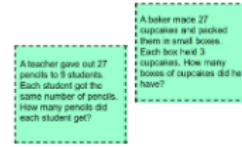


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Day 3: Identify the Unknown

Identify the Unknown

Materials: Identify the Unknown cards and sorting mat



1. Read each problem and identify the unknown. Do you need to find the number of groups or the number of items in a group? Sort the problems under the appropriate headings on the table.
2. Represent each problem using an equation with a symbol for the unknown number.
3. Use pictures, numbers, or words to solve each problem.
4. Share your work with a partner. Justify your reasoning.
5. Write two story problems using the numbers 3, 5 and 15. The first one should be a "How many groups?" type problem. The second one should be a "How many in each group?" type problem. Share your problems with your partner.

Identify the Unknown

Number of Groups Unknown		Number of Items in a Group Unknown	
	Solve:		Solve:
	Solve:		Solve:

Identify the Unknown cards

<p>A teacher gave out 27 pencils to 9 students. Each student got the same number of pencils. How many pencils did each student get?</p>	<p>A baker made 27 cupcakes and packed them in small boxes. Each box held 3 cupcakes. How many boxes of cupcakes did he have?</p>	<p>A gardener had 28 seeds to plant in pots. She decided to plant 7 seeds in each pot. How many pots of seeds did she plant?</p>
<p>A class of 32 students were divided equally into teams for a relay race. Each relay team had 4 students. How many relay teams were there?</p>	<p>A shopkeeper had 28 hats to display in rows in the store window. He decided to display 4 rows with the same number of hats in each row. How many hats were in each row?</p>	<p>A farmer had 32 pounds of grain. He had 8 cows to feed. Each animal was given the same amount of grain. How many pounds of grain did each animal get?</p>

Day 4: Connecting Multiplication and Division: Number of Groups or Group Size?

1. Solve at least 3 problems from card set A-D and at least three from card set M-P. write a multiplication equation for each with a symbol or blank for the unknown.
2. Label the equation indicating which number is number of groups, size of group and total.
3. Write the related division equation for each.
4. Something to think about: Was the divisor always the number of groups or size of group? How did you know which number would be the divisor in the division equation (note for parents: it was the given number in the problem)

Jack has 12 toy helicopters. He wants to put the helicopters into groups of 3. How many groups will he have?



A

Max put 42 chocolates in boxes. He had 7 boxes and put the same number of chocolates in each box. How many chocolates did Max put in each box?



M

Lisa has 28 apricots to put in bags. She wants to put 7 apricots in each bag. How many bags will she need?



B

Sue put 48 tennis balls in containers. She had 6 containers and placed the same number of tennis balls in each container. How many tennis balls did Sue place in each container?



N

Jack has 40 chocolates. He wants to put 8 chocolates on each plate. How many plates will he need?



C

Meg has 28 eggs. She wants to put the same amount of eggs in each carton. If she has 4 cartons, how many eggs will she put in each one?



O

Tom has 12 golf balls. He puts them in groups of 3. How many groups?



D

Scott bought 7 ice cream cones that each cost the same amount. He spent a total of \$21. How much did each ice cream cone cost?



P

Grade 3 Math Calendar

<p>April 27 Roll 2 dice to make a multiplication fact (e.g., roll a 3 and 5 and make $3 \times 5 = 15$). Draw an array to show the fact.</p>	<p>April 28 Farmer Jones has pigs and chickens. How many of each could he have if there are 28 legs?</p>	<p>April 29 Show $\frac{1}{4}$ with at least 4 different models.</p>	<p>April 30 Which has more tires: 9 tricycles or 6 cars? How do you know?</p>	<p>May 1 About how many hours do you sleep each night? About how many hours do you sleep in a week?</p>
<p>May 4 Would you rather have $\frac{1}{4}$ or $\frac{1}{2}$ of a brownie? Explain. Would you rather have $\frac{2}{6}$ or $\frac{5}{6}$ of a brownie? Explain.</p>	<p>May 5 Count out 36 pieces of cereal. How could you share the 36 pieces fairly? How many people would get some? How many pieces would each person get?</p>	<p>May 6 Estimate the number of cups it takes to fill a container with water. Try it. Can you estimate how many $\frac{1}{2}$ cups it will take? Will it be more or less? Why?</p>	<p>May 7 Play a game of Multiplication War. For each turn, each player flips over 2 cards and finds the product. The greater product wins the cards.</p>	<p>May 8 Think of a story problem you could solve with this equation: $5 \times 6 = \underline{\quad}$. Tell the answer.</p>
<p>May 11 What time is it right now? What time will it be in 20 minutes? What time will it be in 12 minutes?</p>	<p>May 12 If you cut 2 granola bars into fourths, how many fourths would you have? Let an adult help you try it to check your thinking.</p>	<p>May 13 Could 6 coins equal 65 cents? If so, what would the 6 coins be? Make a similar coin puzzle and see if someone can solve it.</p>	<p>May 14 Roll 4 dice to build a four-digit number. Have a partner roll 4 dice to build a number. Who rolled the greater number? How do you know?</p>	<p>May 15 If you saw 30 tires, how many cars and how many motorcycles could there be? Share some different possibilities.</p>
<p>May 18 Roll 2 dice. Multiply to find the product. Is the product odd or even? How do you know?</p>	<p>May 19 What fractions mean the same as $\frac{1}{2}$? How can you tell if a fraction is equivalent to $\frac{1}{2}$?</p>	<p>May 20 Write 5 equations in which the answer is 24. Draw model to match each.</p>	<p>May 21 Find 2 books. What is the difference in the number of pages in those books?</p>	<p>May 22 Write a story problem you could solve with this equation: $35 \div 7 = \underline{\quad}$. Tell the answer.</p>

MULTIPLY OR DIVIDE?

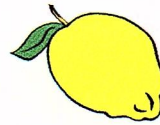
If 32 tomatoes are packed 8 in a bag, then how many bags are needed?



7

MULTIPLY OR DIVIDE?

80 lemons are placed equally into groups of 10. How many groups of lemons are there?



8

MULTIPLY OR DIVIDE?

You have 48 inches of ribbon, which you will cut into pieces that are 8 inches long. How many pieces of ribbon will you have?



9

MULTIPLY OR DIVIDE?

If 72 children are organized 9 into a group, then how many groups will there be?



10

MULTIPLY OR DIVIDE?

Mr. Martin had 70 pieces of paper, and he made bundles by stapling every 10 pieces of paper together. How many bundles could he make?



11

MULTIPLY OR DIVIDE?

There are 60 computers in a truck. If John delivers 10 computers at each house, how many houses does he need to drive to?

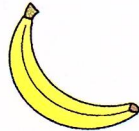


12

MULTIPLY OR DIVIDE?

There are 4 bunches of bananas. Each bunch has 5 bananas. How many bananas are there in all?

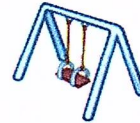
1



MULTIPLY OR DIVIDE?

There are 5 swings at the park. On each swing there are 2 children. How many children are there at the park?

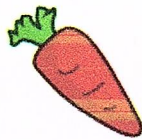
2



MULTIPLY OR DIVIDE?

There are 4 bags with 6 carrots in each bag. How many carrots are there in all?

3



MULTIPLY OR DIVIDE?

There are 9 containers with 4 lolly-pops in each container. How many lolly-pops are there in all?

4



MULTIPLY OR DIVIDE?

There are 12 boxes of ice-creams in the freezer. If 4 ice-creams were in each box, how many are there altogether?

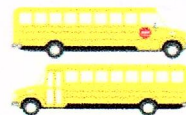
5



MULTIPLY OR DIVIDE?

There are 5 buses with 6 children in each bus. How many children are there in all?

6

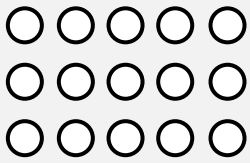


Name: _____

Fact Family Arrays

Write a fact family shown by each array.

example

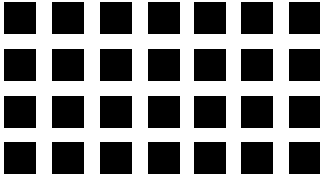


$3 \times 5 = 15$

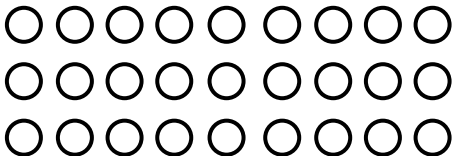
$5 \times 3 = 15$

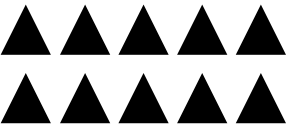
$15 \div 3 = 5$


$15 \div 5 = 3$

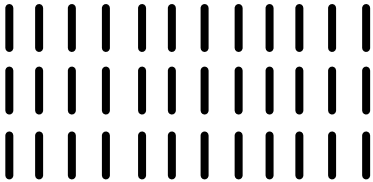
a. 

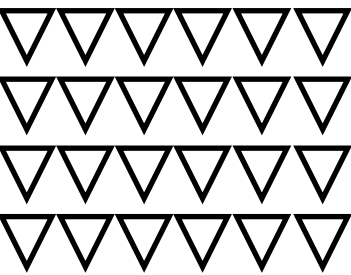
b. 

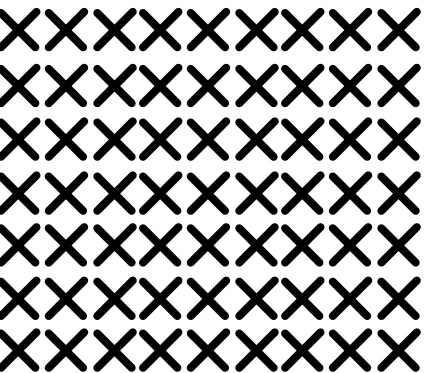
c. 

d. 

e. 

f. 

g. 

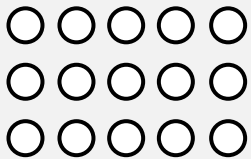
h. 

ANSWER KEY

Fact Family Arrays

Write a fact family shown by each array.

example

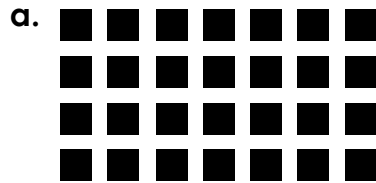


$$3 \times 5 = 15$$

$$5 \times 3 = 15$$

$$15 \div 3 = 5$$

$$15 \div 5 = 3$$



$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 4 = 7$$

$$28 \div 7 = 4$$

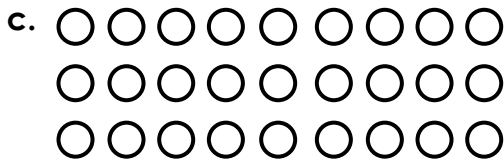


$$4 \times 5 = 20$$

$$5 \times 4 = 20$$

$$20 \div 4 = 5$$

$$20 \div 5 = 4$$

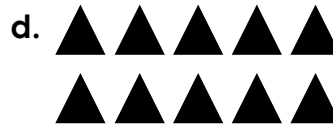


$$3 \times 9 = 27$$

$$9 \times 3 = 27$$

$$27 \div 3 = 9$$

$$27 \div 9 = 3$$



$$2 \times 5 = 10$$

$$5 \times 2 = 10$$

$$10 \div 2 = 5$$

$$10 \div 5 = 2$$

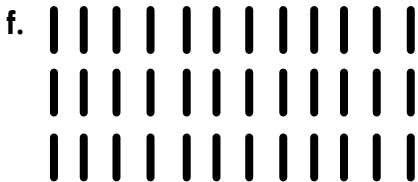


$$2 \times 3 = 6$$

$$3 \times 2 = 6$$

$$6 \div 2 = 3$$

$$6 \div 3 = 2$$

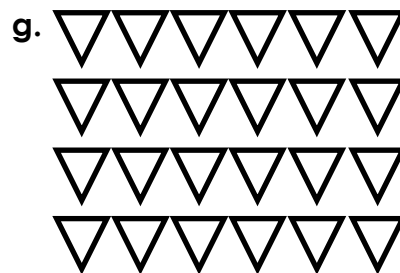


$$3 \times 12 = 36$$

$$12 \times 3 = 36$$

$$36 \div 3 = 12$$

$$36 \div 12 = 3$$

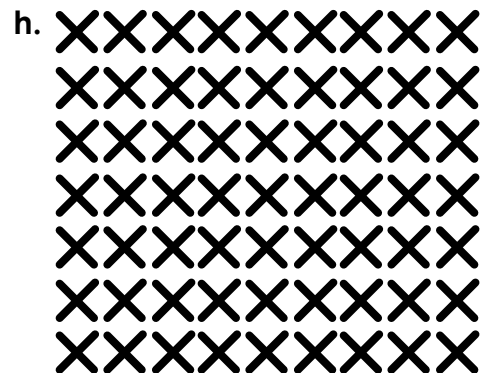


$$4 \times 6 = 24$$

$$6 \times 4 = 24$$

$$24 \div 4 = 6$$

$$24 \div 6 = 4$$



$$7 \times 9 = 63$$

$$9 \times 7 = 63$$

$$63 \div 7 = 9$$

$$63 \div 9 = 7$$

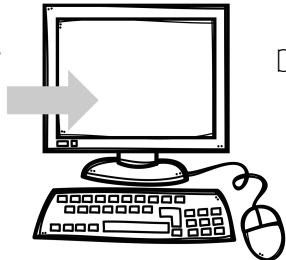


Follow Along!

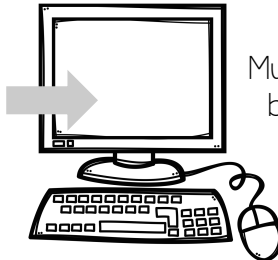
Multiply and divide. Write the new numbers in the frames.

8

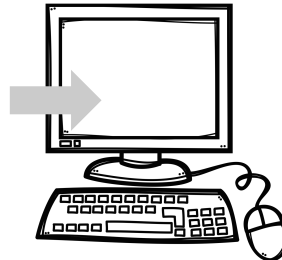
Multiply
by 3



Divide
by 6

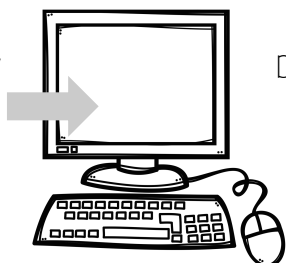


Multiply
by 9



6

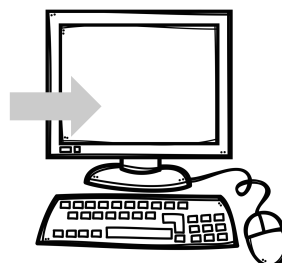
Multiply
by 3



Divide
by 2

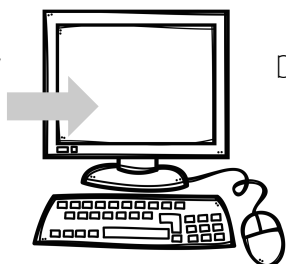


Multiply
by 8



2

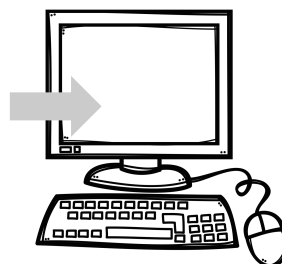
Multiply
by 9



Divide
by 3

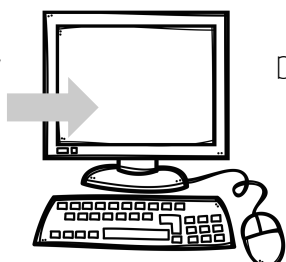


Multiply
by 7

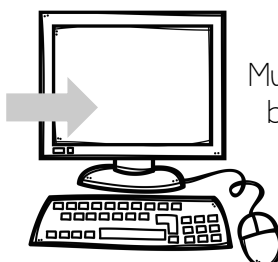


4

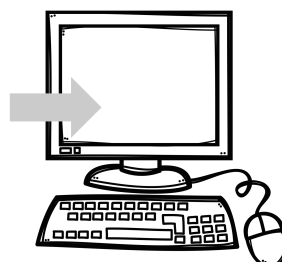
Multiply
by 6



Divide
by 8

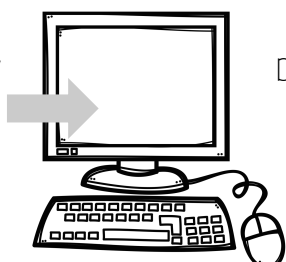


Multiply
by 6



3

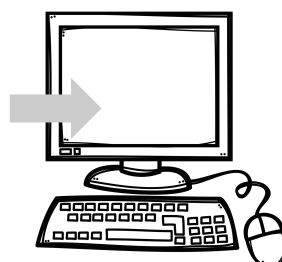
Multiply
by 6



Divide
by 9



Multiply
by 5



Related Facts

For each multiplication fact, write a related division fact.

$7 \times 3 = 21 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$8 \times 6 = 48 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$5 \times 7 = 35 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$9 \times 9 = 81 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$9 \times 3 = 27 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$8 \times 7 = 56 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$9 \times 6 = 54 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$2 \times 6 = 12 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$7 \times 9 = 63 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

$4 \times 6 = 24 \quad \underline{\quad} \div \underline{\quad} = \underline{\quad}$

True or False?

For each equation, circle **true** or **false**.

$9 \div 1 = 9 \quad \text{true} \quad \text{false}$

$45 \div 5 = 8 \quad \text{true} \quad \text{false}$

$24 \div 6 = 4 \quad \text{true} \quad \text{false}$

$28 \div 7 = 3 \quad \text{true} \quad \text{false}$

$32 \div 4 = 8 \quad \text{true} \quad \text{false}$

$42 \div 6 = 7 \quad \text{true} \quad \text{false}$

$64 \div 8 = 7 \quad \text{true} \quad \text{false}$

$18 \div 6 = 3 \quad \text{true} \quad \text{false}$

$15 \div 3 = 5 \quad \text{true} \quad \text{false}$

$16 \div 4 = 5 \quad \text{true} \quad \text{false}$

















































Name: _____

Date: _____

Division: True or False?

Directions: Decide if each number sentence is true or false.

Color a 😊 if it is true and a ☹️ if it is false.

$4 \div 1 = 12 \div 3$  	$30 \div 3 = 40 \div 4$  	$12 \div 3 = 20 \div 5$  	$7 \div 1 = 35 \div 5$  
$6 \div 2 = 9 \div 3$  	$14 \div 2 = 28 \div 3$  	$42 \div 6 = 77 \div 11$  	$3 \div 1 = 6 \div 2$  
$45 \div 5 = 80 \div 10$  	$35 \div 5 = 49 \div 7$  	$40 \div 5 = 64 \div 8$  	$3 \div 1 = 24 \div 8$  
$14 \div 7 = 18 \div 9$  	$8 \div 1 = 42 \div 7$  	$12 \div 2 = 60 \div 10$  	$18 \div 2 = 30 \div 3$  
$48 \div 6 = 72 \div 9$  	$36 \div 9 = 48 \div 12$  	$32 \div 8 = 30 \div 5$  	$55 \div 5 = 18 \div 2$  
$20 \div 4 = 45 \div 5$  	$50 \div 5 = 60 \div 6$  	$56 \div 8 = 12 \div 2$  	$33 \div 3 = 121 \div 11$  

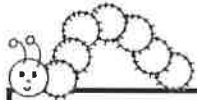
Name: _____ Date: _____



Division: Missing Numbers

Directions: Use two numbers in the box to complete the division sentence on the caterpillar.

The first one has been done for you.



<p>4 6 48 60</p> <p> 48 ÷ 6 = 8</p>	<p>2 3 18 43</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 6</p>	<p>3 9 63 72</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 8</p>
<p>2 6 8 42</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 7</p>	<p>2 4 12 80</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 3</p>	<p>2 18 21 47</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 9</p>
<p>3 6 30 38</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 5</p>	<p>3 12 15 28</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 4</p>	<p>3 4 32 53</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 8</p>
<p>2 3 4 20</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 5</p>	<p>2 3 14 18</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 9</p>	<p>5 6 8 42</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 7</p>
<p>2 12 20 48</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 10</p>	<p>3 7 35 51</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 5</p>	<p>2 12 37 46</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 6</p>
<p>5 6 40 85</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 8</p>	<p>8 10 40 58</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 4</p>	<p>2 18 22 48</p> <p> <input type="text"/> <input type="text"/> <input type="text"/> = 9</p>