

# Summer

## 3rd Grade Math Packet

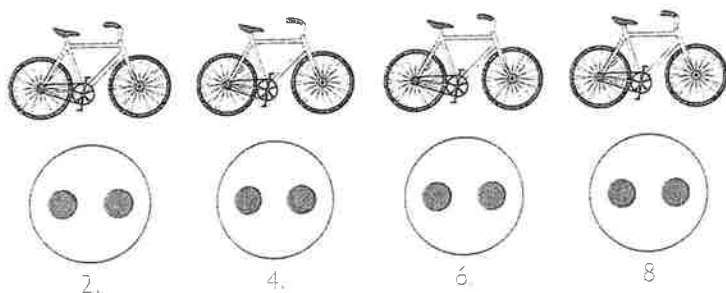


**Name:**

Name \_\_\_\_\_

## Count Equal Groups

A bicycle has 2 tires. Jessica put new tires onto each of 4 bicycles. How many tires do the 4 bicycles have?



4 groups of 2  
is ?

You can draw a picture to find the answer.

- A.** Draw a circle below each bicycle. How many circles did you draw? 4
- B.** Draw counters in each circle to show the number of tires. How many counters did you draw in each circle? 2
- C.** Count. How many counters are there? 8
- D.** How many tires do the 4 bicycles have? 8

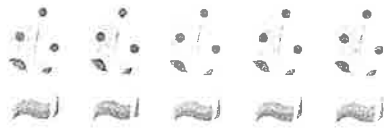
**Show equal groups. Count equal groups to find the total.**

- 1** Each wagon has 4 wheels. There are 3 wagons. How many wheels do the 3 wagons have?  
\_\_\_\_\_

- 2** Elijah builds 5 scooters. Each scooter has 2 wheels. How many wheels do the 5 scooters have?  
\_\_\_\_\_

## Relate Addition and Multiplication

Cara has 5 vases. She places 3 flowers into each vase. How many flowers are in the 5 vases?



$$\underbrace{3 + 3 + 3 + 3 + 3}_{5 \times 3} = 15 \text{ flowers}$$

There are 15 flowers.

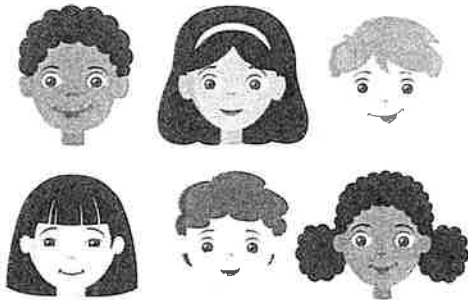
You can add to find how many in all.

5 groups of 3 is 15.

When the same number is added more than once, you can multiply.

5 times 3 is 15.

- 1** Each person has 2 ears. How many ears do the 6 people have?



Add.

$$\begin{array}{r} \underline{2} + \underline{2} + \underline{2} + \\ \underline{2} + \underline{2} + \underline{2} = \end{array}$$

Multiply.

$$\begin{array}{r} \underline{\quad} \text{ groups of } \underline{2} = \\ \underline{\quad} \times \underline{\quad} = \end{array}$$

There are \_\_\_\_\_ ears.

- 2** Each bowl has 7 apples. How many apples are in 3 bowls?



Add.

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

Multiply.

$$\begin{array}{r} \underline{\quad} \text{ groups of } \underline{\quad} = \\ \underline{\quad} \times \underline{\quad} = \end{array}$$

There are \_\_\_\_\_ apples.

## Represent Multiplication with Arrays

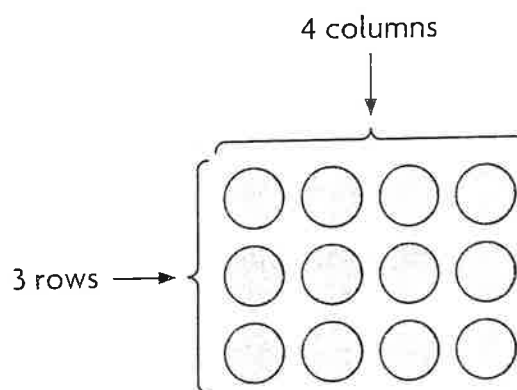
Mr. Brooke's classroom has 3 rows with 4 desks in each row. How many desks are there?

You can make an array to help you find the number of desks.

Count. There are a total of 12 counters. So, 3 rows of 4 equals 12 counters.

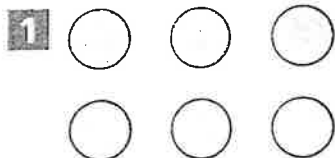
You can use an array to help you write an equation to find the number of desks.

3 rows of 4 = 12, or 3 groups of 4 = 12, or  $3 \times 4 = 12$ .



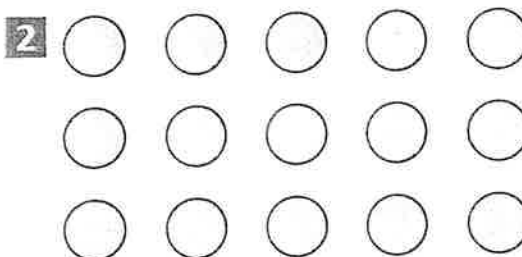
An array shows objects in rows and columns.

Complete.



2 rows of 3 =         

2  $\times$  3 =         



         rows of          =         

          $\times$           =         

- 3** Jack plants 4 rows with 6 trees in each row. How many trees does Jack plant? Make an array for the problem. Write a multiplication equation.

          $\times$           =         

         trees

## Understand the Commutative Property of Multiplication

The Commutative Property of Multiplication says that changing the order of the factors does not change the product.

The multiplication equations below are related. The factors in each multiplication equation are 2 and 4. The product in each multiplication equation is 8.

There are 2 rows of  
4 counters. There  
are 8 counters.



$$2 \times 4 = 8$$

=



$$4 \times 2 = 8$$

There are 4 rows  
of 2 counters.  
There are  
8 counters.

**Draw an array. Then write an equation.**

- 1** Nicolas is setting up chairs. There are 3 rows. He puts 2 chairs in each row. How many chairs does Nicolas set up?

Multiplication Equation

$$\underline{3} \times \underline{2} = \underline{\quad} \quad \underline{\quad} \text{ chairs}$$

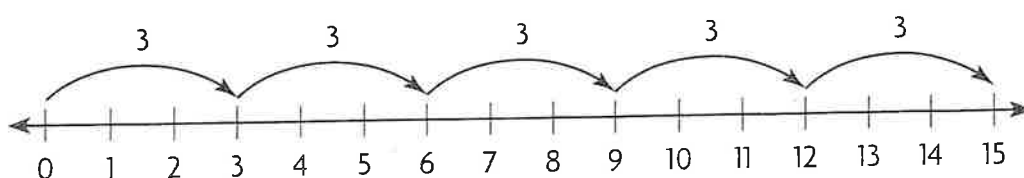
- 2** Nicolas decides to change the order of the chairs. Now there are 2 rows. He puts 3 chairs in each row. How many chairs does Nicolas set up now?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad} \quad \underline{\quad} \text{ chairs}$$

## Represent Multiplication with Number Lines

Reg uses 5 nails to measure the length of a hammer. Each nail is 3 inches long. How many inches long is the hammer?

You can find the length of the hammer by using a number line to count by the number in each group.



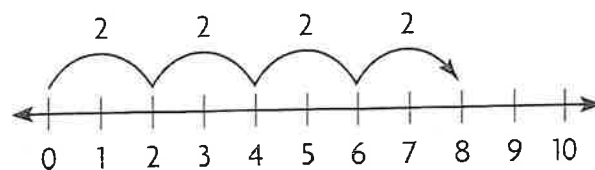
There are  
5 equal  
groups of 3.

- By what number do you count? 3
- How many jumps on the number line do you make? 5 jumps
- Write an equation. 5  $\times$  3 = 15
- How many inches long is the hammer? 15 inches

**Show equal groups. Write a multiplication equation. Solve.**

- 1** Ella uses 4 rolling pins to measure the length of a table. Each rolling pin is 2 feet long. How many feet long is the table?

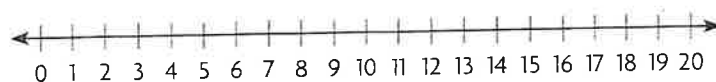
$$\underline{4} \times \underline{2} = \underline{\quad}$$



The table is 8 feet long.

- 2** Ethan ran 6 miles each day for 3 days. How many miles did he run in 3 days?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



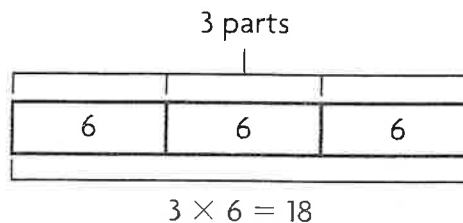
Ethan ran 18 miles.

## Represent Multiplication with Bar Models

Monica sees 3 trucks. Each truck has 6 wheels. How many wheels are on 3 trucks?

You can use a bar model to find the product. The whole is made of 3 equal groups, or parts, with 6 wheels in each group.

There are 3 boxes.  
Each box stands for  
1 truck, or 1 group.



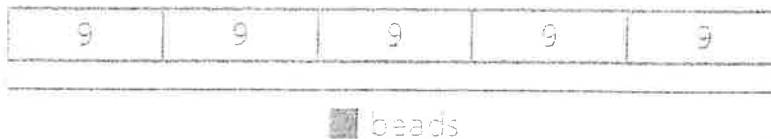
There are  
6 wheels in  
each group.

The whole bar model  
shows how many  
wheels there are on  
3 trucks.

There are 18 wheels on 3 trucks.

**Draw a bar model. Write a multiplication equation. Solve.**

- 1** Taylor wants to make 5 bracelets. She needs 9 beads for each bracelet. How many beads does Taylor need?



$$\underline{5} \times \underline{9} = \underline{\quad}$$

Taylor needs \_\_\_\_\_ beads.

- 2** A park has 7 picnic tables. There are 4 people sitting at each table. How many people are there at 7 tables?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

There are \_\_\_\_\_ people at 7 tables.

Name \_\_\_\_\_

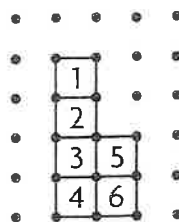
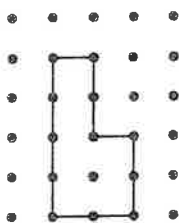
# Understand Area by Counting Unit Squares

A **unit square** is a square with side lengths of 1 unit. One unit square has an area of 1 square unit. **Area** measures the number of unit squares needed to cover a surface.

Find the area of this figure.

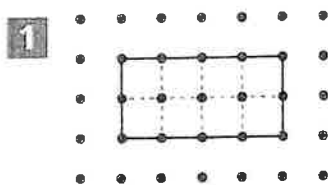
Connect the dots to form unit squares.

Count the number of unit squares inside the figure.

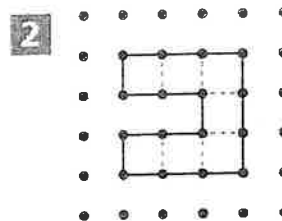


The area of the figure is 6 square units.

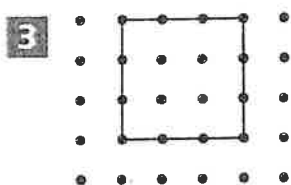
Count to find the area of the figure.



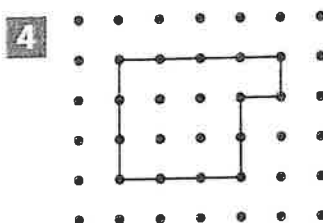
\_\_\_\_\_ square units



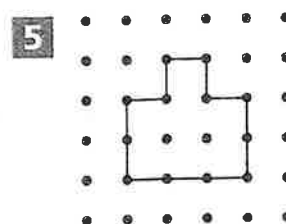
\_\_\_\_\_ square units



\_\_\_\_\_ square units



\_\_\_\_\_ square units

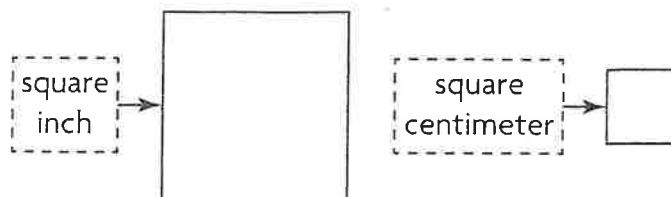


\_\_\_\_\_ square units



# Measure Area by Counting Unit Squares

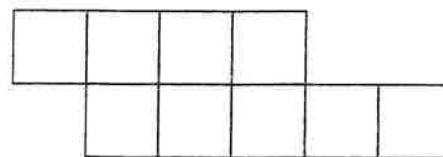
You can find the area of a figure by counting the number of square inches or square centimeters that cover the shape.



**Count to find the area of the figure.**

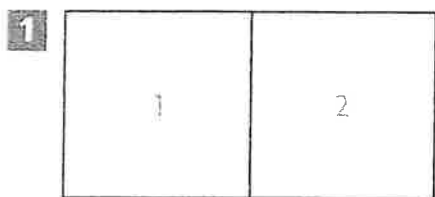
Each unit square is 1 square centimeter.

Count the number of square-centimeter units that cover the figure.

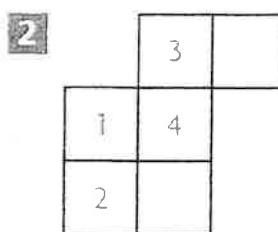


The area is 9 square centimeters.

**Count to find the area of the figure.**

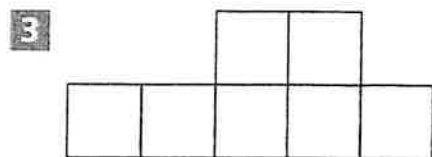


Area = \_\_\_\_\_ square inches

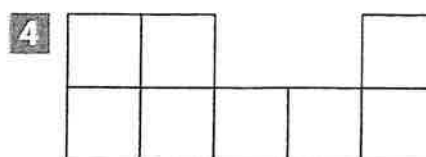


Area = \_\_\_\_\_ square centimeters

**Count to find the area of the figure.**



Area = \_\_\_\_\_ square centimeters



Area = \_\_\_\_\_ square centimeters

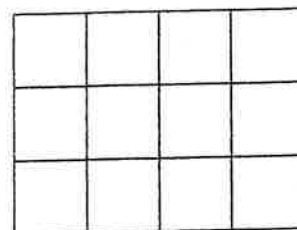
# Relate Area to Addition and Multiplication

You can use repeated addition or multiplication to find the area of a rectangle.

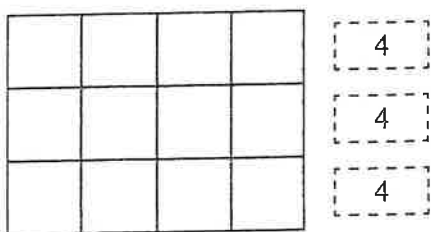
**What is the area of the figure?**

Each unit square is 1 square inch.

The area is the number of square inches that cover the figure.



Find the number of square inches in each row.



You can add to find the total.

Add the number of square inches in each row.

$$4 + 4 + 4 = 12$$

You can multiply to find the total.

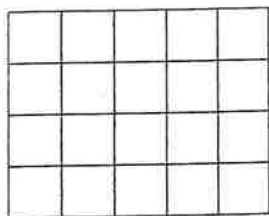
Multiply the number in each row by the number of rows.

$$3 \times 4 = 12$$

The area is 12 square inches.

**Find the area of the figure. Show repeated addition.  
Show multiplication.**

- 1** Each unit square is 1 square inch.

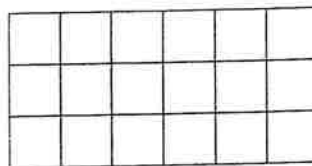


Add.  $5 + 5 + 5 + 5 = 20$

Multiply.  $4 \times 5 = 20$

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

- 2** Each unit square is 1 square centimeter.



Add. \_\_\_\_\_

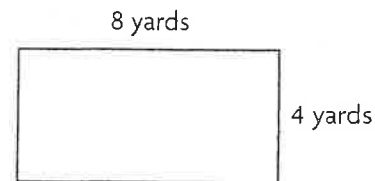
Multiply. \_\_\_\_\_

Area = \_\_\_\_\_ square centimeters

## Solve Problems with Area

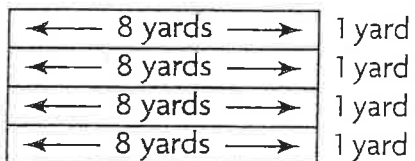
You can use multiplication to find the area of a rectangle.

A garden has the shape of the rectangle shown.  
What is the area of the garden?



Divide the rectangle into 4 rows.  
Each row is 1 yard high.

Each row is 8 yards long.



Use the drawing.

Multiply to find the area.

$$4 \times 8 = 32$$

Record the area in square units.

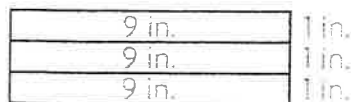
Area = 32 square yards

The area of the garden is 32 square yards.

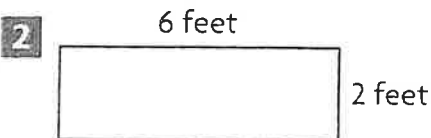
Find the area of the rectangle. Write a multiplication equation.



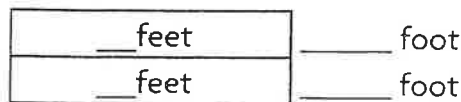
Multiply.  $3 \times 9 =$  \_\_\_\_\_



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



Multiply. \_\_\_\_\_



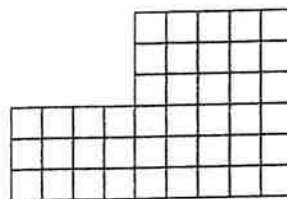
Area = \_\_\_\_\_ square feet

# Find the Area of Combined Rectangles

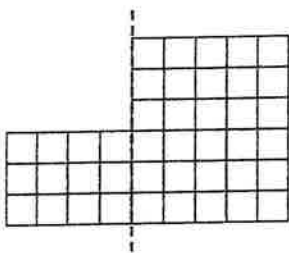
You can break apart a figure made of combined rectangles into smaller rectangles to find the area of the figure.

Each unit square is 1 square inch.

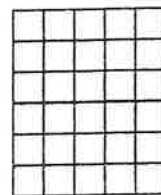
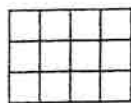
What is the area of the figure?



Draw a line to break the figure into two rectangles.



Multiply to find the area of each rectangle.



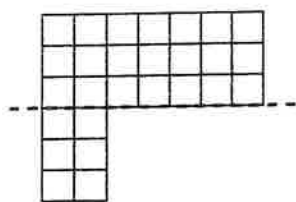
$$3 \times 4 = 12$$

$$6 \times 5 = 30$$

To find the total area of the figure, add the areas of the two rectangles.  $12 + 30 = 42$

The area is 42 square inches.

- 1** What is the area of the figure?  
Complete the equations.



1 ☐ = 1 square meter

Area of top rectangle:

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

Area of bottom rectangle:

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

Add the areas:

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

Area =          square meters

## Multiply with 2 and 4

When you multiply with 2, the product is the same as when you add doubles. When you multiply with 4, you can use a 2s fact and double the product.

Kavita rides her bike 5 miles each day. How many miles does Kavita ride her bike in 4 days?

**Find the product  $4 \times 5$ .**

Use a 2s fact.

$$2 \times 5 = 10$$

Double the product.

$$10 + 10 = 20$$

$$4 \times 5 = 20$$

Kavita rides her bike 20 miles in 4 days.

**Use a 2s fact and doubling to find the product.**

**1**  $4 \times 3 = \square$

**2**  $4 \times 6 = \square$

$$2 \times 3 = \underline{6}$$

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

$$\underline{6} + \underline{6} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$4 \times 3 = \underline{\quad}$$

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

**Find the product.**

**3**  $2 \times 7 = \underline{\quad}$

**4**  $2 \times 8 = \underline{\quad}$

**5**  $4 \times 4 = \underline{\quad}$

**6**  $4 \times 8 = \underline{\quad}$

**7**  $2 \times 9 = \underline{\quad}$

**8**  $4 \times 7 = \underline{\quad}$

**9**  $6 \times 2 = \underline{\quad}$

**10**  $4 \times 9 = \underline{\quad}$

**11**  $2 \times 5 = \underline{\quad}$

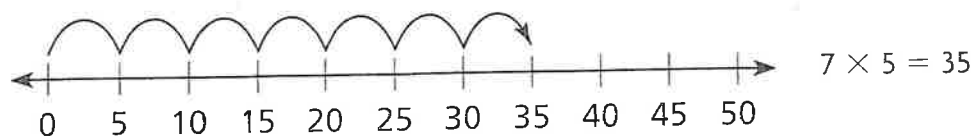
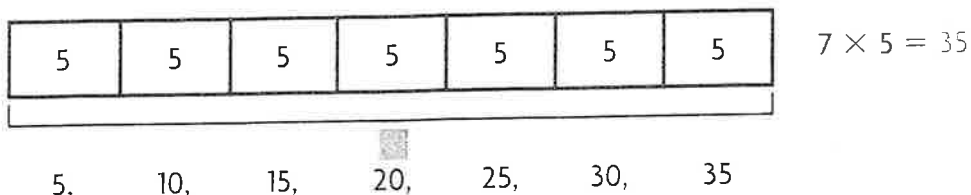
## Multiply with 5 and 10

When you multiply with 5 or with 10, you can use a bar model or count on a number line to find the product.

Greg reads 5 pages each day for 7 days. How many pages does Greg read?

Find the product  $7 \times 5$ .

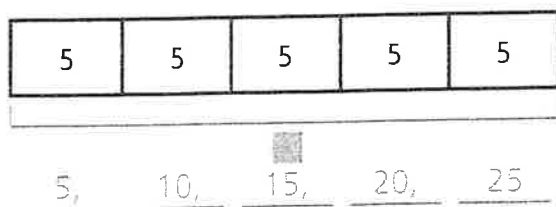
Use a bar model or count by fives on a number line.



Greg reads 35 pages.

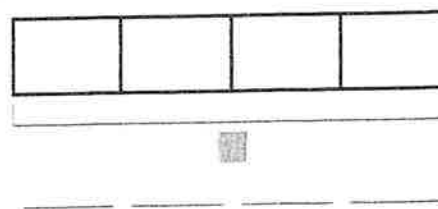
Complete the bar model. Find the product.

1  $5 \times 5 =$    



$5 \times 5 =$  \_\_\_\_\_

2  $4 \times 10 =$    



$4 \times 10 =$  \_\_\_\_\_

Find the product.

3  $5 \times 6 =$  \_\_\_\_\_

4  $5 \times 10 =$  \_\_\_\_\_

5  $9 \times 5 =$  \_\_\_\_\_

## Multiply with 3 and 6

A drawing of equal groups, a bar model, or a number line can help you help multiply with 3 or with 6. You can use a 5s fact and addition or a 3s fact and doubling to help multiply with 6.

There are 9 oranges in each box. How many oranges are in 6 boxes?

Find the product  $6 \times 9$ .

Use a 5s fact and addition.

$$\begin{aligned} 6 \times 9 &= \underbrace{9 + 9 + 9 + 9 + 9}_{5 \times 9} + 9 \\ &= 45 + 9 \\ &= 54 \end{aligned}$$

Use a 3s fact and doubling.

$$\begin{aligned} 6 \times 9 &= \underbrace{9 + 9 + 9}_{3 \times 9} + \underbrace{9 + 9 + 9}_{3 \times 9} \\ &= 27 + 27 \\ &= 54 \end{aligned}$$

There are 54 oranges.

**1** Use a 5s fact and addition to find the product.

$6 \times 8 = \square$

$6 \times 8 = 5 \times 8 + 8$

$= \underline{40} + \underline{8}$

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

**2** Use a 3s fact and doubling to find the product.

$6 \times 7 = \square$

$= \underline{\quad} \times 7 + \underline{\quad} \times 7$

$= \underline{\quad} + \underline{\quad}$

$6 \times 7 = \underline{\quad}$

Find the product.

**3**  $6 \times 4 = \underline{\quad}$

**4**  $7 \times 3 = \underline{\quad}$

**5**  $6 \times 3 = \underline{\quad}$

**6**  $5 \times 3 = \underline{\quad}$

**7**  $6 \times 10 = \underline{\quad}$

**8**  $7 \times 6 = \underline{\quad}$

## Understand the Identity and Zero Properties of Multiplication

When you multiply a number and 1, the product is that number.

When you multiply a number and 0, the product is 0.

Tia has a box. She puts 5 crayons in the box. How many crayons are in the box?

Use the **Identity Property of Multiplication**.

The product of any number and 1 is that number.

$1 \times 5 = 5$  There are 5 crayons in the box.

Tia puts 0 pencils in the box. How many pencils are in the box?

Use the **Zero Property of Multiplication**.

The product of 0 and any number is 0.

$1 \times 0 = 0$  There are 0 pencils in the box.

**Complete to find the product.**

**1**  $0 \times 3 = \square$

0 groups of 3

$0 \times 3 = \underline{\hspace{2cm}}$

**2**  $1 \times 8 = \square$

       group of       

$1 \times 8 = \underline{\hspace{2cm}}$

**Find the product.**

**3**  $2 \times 0 = \underline{\hspace{2cm}}$

**4**  $6 \times 1 = \underline{\hspace{2cm}}$

**5**  $9 \times 0 = \underline{\hspace{2cm}}$

**6**  $1 \times 7 = \underline{\hspace{2cm}}$

**7**  $0 \times 8 = \underline{\hspace{2cm}}$

**8**  $4 \times 1 = \underline{\hspace{2cm}}$



# Understand the Distributive Property

You can use an array to model multiplication. Then you can break apart the array into smaller arrays to model facts you know to help find the product.

Find the product  $3 \times 9$ .

Make an array of 3 rows with 9 squares in each row.



$$3 \times 9$$

Break apart the array to model 9 as  $5 + 4$ .

$$\begin{aligned} 3 \times 9 &= (3 \times 5) + (3 \times 4) \\ &= 15 + 12 \\ &= 27 \end{aligned}$$



$$3 \times 5$$

+



+

$$3 \times 4$$

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

Use the array to complete the equations to show the Distributive Property.

1



$$3 \times 8 = \blacksquare$$

$$3 \times 8 = 3 \times (\underline{4} + \underline{4})$$

$$3 \times 8 = (3 \times \underline{\quad}) + (3 \times \underline{\quad})$$

$$3 \times 8 = \underline{\quad} + \underline{\quad}$$

$$3 \times 8 = \underline{\quad}$$

2



$$4 \times 7 = \blacksquare$$

$$4 \times 7 = 4 \times (\underline{\quad} + \underline{\quad})$$

$$4 \times 7 = (4 \times \underline{\quad}) + (4 \times \underline{\quad})$$

$$4 \times 7 = \underline{\quad} + \underline{\quad}$$

$$4 \times 7 = \underline{\quad}$$

## Understand the Associative Property of Multiplication

You can change the grouping of the factors to use facts you know or to make it easier to find a product.

When the grouping of factors is changed, the product remains the same. This is called the **Associative Property of Multiplication**.

Each week, Leo hikes 4 miles on each of 2 days. He has gone on the hikes for 3 weeks. How many miles has Leo hiked in 3 weeks?

Find the product  $3 \times 2 \times 4$ .

**A.** Find the product  $(3 \times 2) \times 4$ .

$$\begin{array}{c} (3 \times 2) \times 4 \\ \downarrow \\ 6 \times 4 = 24 \end{array}$$

**B.** Find the product  $3 \times (2 \times 4)$ .

$$\begin{array}{c} 3 \times (2 \times 4) \\ \downarrow \\ 3 \times 8 = 24 \end{array}$$

Leo hiked 24 miles.

Complete to find the product.

**1**  $2 \times (5 \times 3) = \blacksquare$

$(2 \times \underline{5}) \times 3 = \blacksquare$

$\underline{\quad} \times 3 = \underline{\quad}$

$2 \times (5 \times 3) = \underline{\quad}$

**2**  $(7 \times 4) \times 2 = \blacksquare$

$7 \times (4 \times \underline{\quad}) = \blacksquare$

$7 \times \underline{\quad} = \underline{\quad}$

$(7 \times 4) \times 2 = \underline{\quad}$

Show another way to group the factors. Then find the product.

**3**  $(2 \times 4) \times 2$

**4**  $5 \times (2 \times 7)$

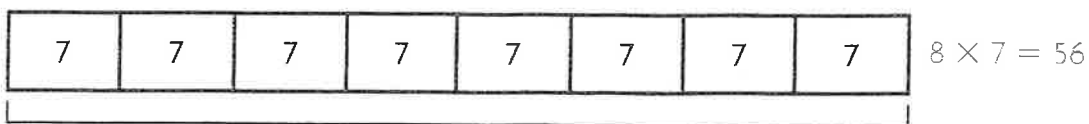
## Multiply with 7

You can use a bar model to help you multiply with 7.

Sasha does 7 push-ups each day for 8 days. How many push-ups does Sasha do?

Find the product  $8 \times 7$ .

Draw a bar model. Count multiples of 7 eight times.

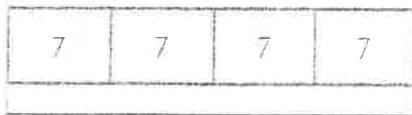


7, 14, 21, 28, 35, 42, 49, 56

Sasha does 56 push-ups.

Draw a bar model to find the product.

1  $4 \times 7 =$    



2  $7 \times 7 =$    

$4 \times 7 =$  \_\_\_\_\_

$7 \times 7 =$  \_\_\_\_\_

3  $3 \times 7 =$    

4  $6 \times 7 =$    

$3 \times 7 =$  \_\_\_\_\_

$6 \times 7 =$  \_\_\_\_\_

Find the product.

5  $2 \times 7 =$  \_\_\_\_\_

6  $7 \times 5 =$  \_\_\_\_\_

7  $7 \times 9 =$  \_\_\_\_\_

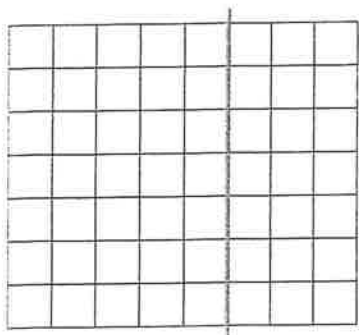
## Multiply with 8

You can draw a visual model and use the Distributive Property to help you multiply with 8.

Dora cycles 8 miles each day. How many miles does she cycle in 7 days?

Find the product  $7 \times 8$ .

Draw an area model showing 7 rows with 8 squares in each row. Then use the Distributive Property.



Pick facts you know. Since  $8 = 5 + 3$ , you can use a 5s fact and a 3s fact.

$$7 \times 8 = 7 \times (5 + 3)$$

$$7 \times 8 = (7 \times 5) + (7 \times 3)$$

$$7 \times 8 = 35 + 21$$

$$7 \times 8 = 56$$

Dora cycles 56 miles.

Use the Distributive Property to find the product.

**1**  $4 \times 8 = \square$

$$4 \times 8 = 4 \times (6 + \underline{2})$$

$$4 \times 8 = (4 \times 6) + (4 \times \underline{\quad})$$

$$4 \times 8 = \underline{\quad} + \underline{\quad}$$

$$4 \times 8 = \underline{\quad}$$

**2**  $9 \times 8 = \square$

$$9 \times 8 = 9 \times (4 + \underline{\quad})$$

$$9 \times 8 = (9 \times \underline{\quad}) + (9 \times \underline{\quad})$$

$$9 \times 8 = \underline{\quad} + \underline{\quad}$$

$$9 \times 8 = \underline{\quad}$$

Find the product.

**3**  $6 \times 8 = \underline{\quad}$

**4**  $\underline{\quad} = 8 \times 5$

**5**  $8 \times 8 = \underline{\quad}$

## Multiply with 9

You can combine strategies and use facts you know and properties to multiply with 9.

A bag of trail mix weighs 9 ounces. What is the weight of 9 bags of trail mix?

**Find the product  $9 \times 9$ .**

Use the Distributive Property. Pick facts you know for the second factor.

Since  $9 = 5 + 4$ , you can use a 5s fact and a 4s fact.

$$9 \times 9 = 9 \times (5 + 4)$$

$$9 \times 9 = (9 \times 5) + (9 \times 4)$$

$$9 \times 9 = 45 + 36$$

$$9 \times 9 = 81$$

The weight of 9 bags is 81 ounces.

**Use the Distributive Property to find the product.**

**1**  $8 \times 9 = \square$

$$8 \times 9 = 8 \times (3 + \underline{6})$$

$$8 \times 9 = (8 \times \underline{\quad}) + (8 \times \underline{\quad})$$

$$8 \times 9 = \underline{\quad} + \underline{\quad}$$

$$8 \times 9 = \underline{\quad}$$

**2**  $9 \times 7 = \square$

$$9 \times 7 = 9 \times (5 + \underline{\quad})$$

$$9 \times 7 = (9 \times \underline{\quad}) + (9 \times \underline{\quad})$$

$$9 \times 7 = \underline{\quad} + \underline{\quad}$$

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

**Find the product.**

**3**  $9 \times 3 = \underline{\quad}$

**4**  $5 \times 9 = \underline{\quad}$

**5**  $9 \times 2 = \underline{\quad}$

**6**  $0 \times 9 = \underline{\quad}$

**7**  $10 \times 9 = \underline{\quad}$

**8**  $9 \times 6 = \underline{\quad}$

# Identify Number Patterns on the Multiplication Table

You can use a multiplication table to look for patterns.

What multiplication facts are shown in the column for the factor 4? What even or odd pattern do you see in the products?

		column ↓										
×		1	2	3	4	5	6	7	8	9	10	← factors
1	1	2	3	4	5	6	7	8	9	10		
2	2	4	6	8	10	12	14	16	18	20		
3	3	6	9	12	15	18	21	24	27	30	← row	
4	4	8	12	16	20	24	28	32	36	40		
5	5	10	15	20	25	30	35	40	45	50		
6	6	12	18	24	30	36	42	48	54	60		
7	7	14	21	28	35	42	49	56	63	70		
8	8	16	24	32	40	48	56	64	72	80		
9	9	18	27	36	45	54	63	72	81	90		
10	10	20	30	40	50	60	70	80	90	100		
												↑ factors

The product is shown in the table where the row and the column meet.

$1 \times 4 = 4$

$5 \times 4 = 20$

$8 \times 4 = 32$

$2 \times 4 = 8$

$6 \times 4 = 24$

$9 \times 4 = 36$

$3 \times 4 = 12$

$7 \times 4 = 28$

$10 \times 4 = 40$

$4 \times 4 = 16$

These products all are even.

Is the product even or odd? Write *even* or *odd*.

**1**  $9 \times 4$

**2**  $3 \times 6$

**3**  $9 \times 7$

**4**  $2 \times 10$

**5**  $5 \times 7$

## Use the Distributive Property

The **Distributive Property** states that multiplying a sum by a number is the same as multiplying each addend by the number and then adding the products.

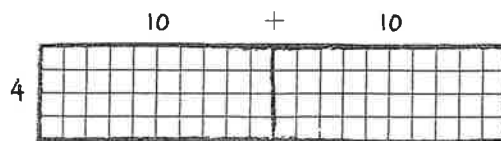
Ben is tiling his hallway. He places 4 rows of tiles with 20 tiles in each row. How many tiles does he use?

Find  $4 \times 20$ . You can break apart 20.

$$4 \times 20 = 4 \times (10 + 10) \quad \leftarrow \text{Break apart.}$$

$$= (4 \times 10) + (4 \times 10) \quad \leftarrow \text{Multiply.}$$

$$= 40 + 40 = 80 \quad \leftarrow \text{Add.}$$



Ben uses 80 tiles.

- 1** Jessica has 2 boxes of books. Each box has 40 books. How many books are in 2 boxes?



$$\begin{aligned} 2 \times 40 &= 2 \times (10 + 10 + 10 + 10) \\ &= (2 \times 10) + (2 \times 10) + (2 \times 10) + (2 \times 10) \\ &= \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ books} \end{aligned}$$

Write the product. Write one way to break apart a factor into multiples of 10.

**2**  $9 \times 20 = \underline{\hspace{2cm}}$

$$(\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$$

**3**  $4 \times 50 = \underline{\hspace{2cm}}$

$$\begin{aligned} &(\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) + \\ &(\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \end{aligned}$$

## Use the Associative Property of Multiplication

The **Associative Property** states that when the grouping of factors is changed, the product remains the same.

Jasmine earns \$9 a day for feeding rabbits and chickens.  
How much money does Jasmine earn in 20 days?  
Find  $20 \times 9$ .

20 is a multiple of 10. I can break it apart into  $2 \times 10$ .

$$20 \times 9 = (\underline{2} \times \underline{10}) \times 9 \quad \leftarrow \text{Break apart 20 using 10 as a factor.}$$

$$= 2 \times (\underline{10 \times 9}) \quad \leftarrow \text{Use the Associative Property to change the grouping of the factors.}$$

$$= (10 \times 9) + (\underline{10 \times 9}) \quad \leftarrow \text{Use the Distributive Property. There are 2 groups of } (10 \times 9). \text{ Multiply.}$$

$$= 90 + \underline{90} = \underline{180} \quad \leftarrow \text{Add.}$$

Jasmine earns \$180 in 20 days.

- 1** Otis plants 50 rows of flowers. He plants 8 flowers in each row. How many flowers does Otis plant in all?

$$\begin{aligned} 50 \times 8 &= (5 \times 10) \times \underline{8} \\ &= \underline{\quad} \times (\underline{\quad} \times \underline{\quad}) \\ &= (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) \\ &\quad + (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) \\ &= \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \text{ flowers} \end{aligned}$$

Show two ways to group the factors.

**2**  $40 \times 9 = (\underline{\quad} \times \underline{\quad}) \times \underline{\quad} = \underline{\quad} \times (\underline{\quad} \times \underline{\quad})$

**3**  $3 \times 80 = \underline{\quad} \times (\underline{\quad} \times \underline{\quad}) = (\underline{\quad} \times \underline{\quad}) \times \underline{\quad}$



## Use Place-Value Strategies to Multiply with Multiples of 10

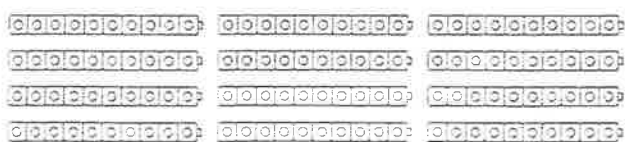
Ella has 4 sheets of animal stickers. There are 30 stickers on each sheet. How many stickers does Ella have?

Find  $4 \times 30 = \square$ .

Use what you know about place value.

$$\begin{aligned} 4 \times 30 &= 4 \times 3 \text{ tens} \quad \leftarrow \text{Rewrite.} \\ &= 12 \text{ tens} \quad \leftarrow \text{Multiply.} \\ &= 120 \end{aligned}$$

Use connecting cubes to represent the tens.



Ella has 120 stickers.

**Solve.**

- 1** Santosa practices singing 5 days a week. He practices for 20 minutes each day. How many minutes does Santosa practice in a week?

$$\begin{aligned} 5 \times 20 &= 5 \times \underline{2 \text{ tens}} \\ &= \underline{10 \text{ tens}} \\ &= \underline{\hspace{2cm}} \text{ minutes} \end{aligned}$$

- 2** There are 40 batteries in a package. How many batteries are there in 8 packages?
- \_\_\_\_\_

**Use place value to find the number of tens. Find the product.**

**3**  $6 \times 30 = 6 \times \underline{\hspace{2cm}} \text{ tens}$

$$= \underline{\hspace{2cm}} \text{ tens}$$

$$= \underline{\hspace{2cm}}$$

**4**  $80 \times 2 = \underline{\hspace{2cm}} \text{ tens} \times 2$

$$= \underline{\hspace{2cm}} \text{ tens}$$

$$= \underline{\hspace{2cm}}$$

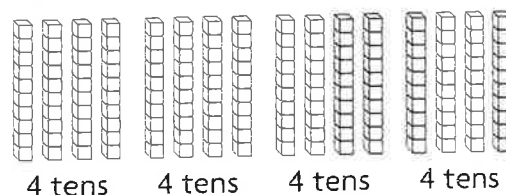
# Multiply Multiples of 10 by 1-Digit Numbers

There are 4 tables in the lunchroom. There are 40 plates on each table. How many plates are there on 4 tables?

Find  $4 \times 40 = \square$ .

**A.** Use place-value blocks.

Show 4 groups of 4 tens.



**B.** Find the total number of blocks.

$$4 \text{ tens} + 4 \text{ tens} + 4 \text{ tens} + 4 \text{ tens} = \underline{16 \text{ tens}}$$

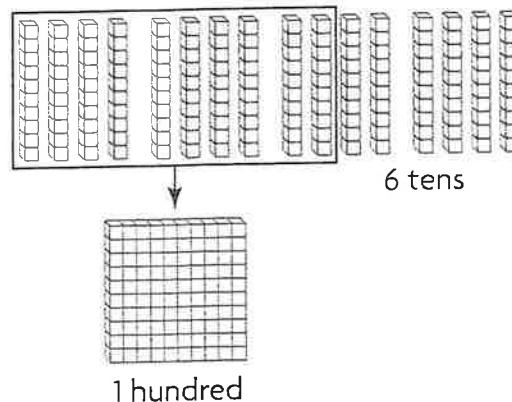
$$4 \times 40 = 16 \text{ tens}$$

**C.** Regroup 16 tens as hundreds and tens.

$$4 \times 40 = 1 \text{ hundred } 6 \text{ tens.}$$

$$= \underline{100} + \underline{60}$$

$$= \underline{160}$$



There are 160 plates on 4 tables.

**1** It took Hiro 3 hours to drive from Miami to Melbourne. He drove 60 miles each hour. How many miles did Hiro drive?

\_\_\_\_\_

**Find the product.**

**2**  $50 \times 2 = \underline{\hspace{2cm}}$

**3**  $6 \times 90 = \underline{\hspace{2cm}}$

**4**  $\underline{\hspace{2cm}} = 30 \times 7$

**5** 
$$\begin{array}{r} 70 \\ \times 8 \\ \hline \end{array}$$

**6** 
$$\begin{array}{r} 80 \\ \times 5 \\ \hline \end{array}$$

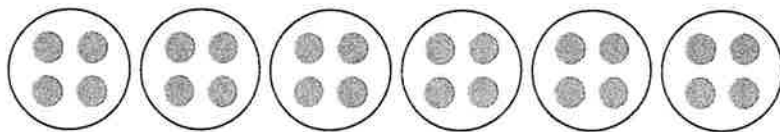
**7** 
$$\begin{array}{r} 40 \\ \times 3 \\ \hline \end{array}$$

## Represent Division

Equal groups are groups that have the same number of objects. You can draw a picture to show dividing into equal groups.

Lola has 24 dog biscuits. She puts an equal number of biscuits on each of 6 plates. How many dog biscuits are on each plate?

Draw 6 plates. Draw to separate 24 dog biscuits into an equal number of biscuits on each plate.



24 dog biscuits; 6 groups;  
4 dog biscuits in each group

There are 4 dog biscuits on each plate.

- 1** Lateisha has 24 apples. She puts 8 apples in each bag.  
How many bags does Lateisha fill?

24 apples; 8 apples in each group  
\_\_\_\_\_ bags

- 2** Xavier has 35 beads. He puts 7 beads on each bracelet.  
How many bracelets does Xavier make?

\_\_\_\_\_ beads; \_\_\_\_\_ beads in each group  
\_\_\_\_\_ bracelets

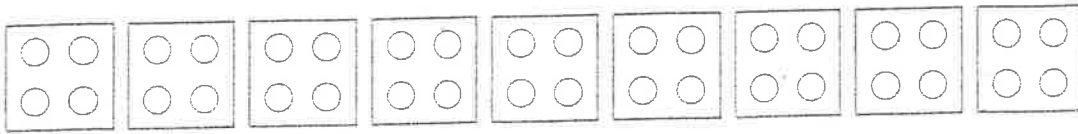
- 3** Sibbi sells 27 raffle tickets. He sells an equal number of tickets on each of 3 days. How many tickets does Sibbi sell each day?

\_\_\_\_\_ tickets; \_\_\_\_\_ days  
\_\_\_\_\_ tickets each day

## Separate Objects into Equal Groups

Jamal collects 36 seashells. He separates them into 9 equal groups. How many seashells are in each group?

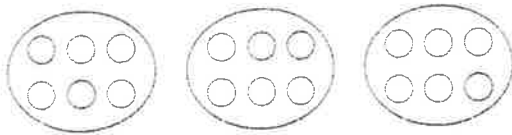
Show how the 36 seashells can be separated into 9 equal groups.



Jamal can make 9 equal groups with 4 seashells in each group.

**Separate into equal groups to solve.**

- 1** Chyou has 18 pieces of sea glass. She separates them into 3 equal piles. How many pieces of sea glass are in each pile?



\_\_\_\_\_ pieces of sea glass

- 2** Adeline has 35 toy cars. She puts an equal number of cars on each of 5 shelves. How many cars are on each shelf?

\_\_\_\_\_ cars

- 3** Jakub buys a box of 24 juice pouches. He puts an equal number of pouches on each of 3 tables. How many juice pouches are on each table?

\_\_\_\_\_ juice pouches

## Find the Number of Equal Groups

Lili has 21 coins. She puts 3 coins in each envelope.  
How many envelopes does Lili fill?

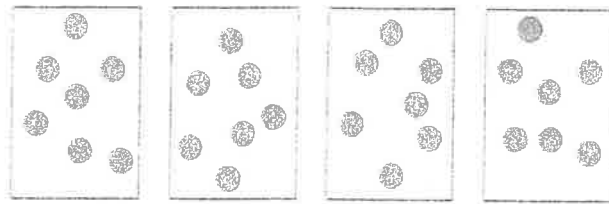
Draw to show the coins separated into equal groups of 3.



21 in all; 3 in each group

Lili fills 7 envelopes.

- 1** Keng has 28 flowers. He puts 7 flowers into each vase.  
How many vases does Keng fill?



\_\_\_\_\_ vases

- 2** Tali has 32 stickers. She decorates each notebook with 4 stickers. How many notebooks does Tali decorate?

\_\_\_\_\_ notebooks

- 3** Greg buys 30 pencils. He puts 5 pencils in each pencil case. How many pencil cases does Greg fill?

\_\_\_\_\_ pencil cases

- 4** Ani has 14 seeds. She plants 2 seeds in each pot. How many pots does Ani fill?

\_\_\_\_\_ pots

## Relate Subtraction and Division

Liam has 12 cups of soup in a bowl. Each serving of soup is 2 cups. How many servings does Liam have?

You can use repeated subtraction to solve.

Keep subtracting 2 until you get to zero. Count how many times 2 is subtracted.

$$12 - 2 = 10 \Rightarrow 10 - 2 = 8 \Rightarrow 8 - 2 = 6 \Rightarrow \\ 6 - 2 = 4 \Rightarrow 4 - 2 = 2 \Rightarrow 2 - 2 = 0$$

2 can be subtracted 6 times from 12.

Liam has 6 servings of soup.

Write a division equation to model the problem.

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

Use repeated subtraction to solve. Then write a division equation to model the problem.

12 is the  
**dividend**. 2 is  
the **divisor**.  
6 is the  
**quotient**.

- 1** Gina puts 20 bagels on display in the shop. She has 4 of each flavor. How many flavors of bagels are there?

$$\text{Repeated subtraction: } 20 - \underline{4} = 16 \Rightarrow 16 - \underline{4} = 12 \Rightarrow \\ 12 - 4 = 8 \Rightarrow 8 - 4 = 4 \Rightarrow 4 - 4 = 0$$

$$\text{Division: } \underline{20 \div 4 = 5}$$

There are 5 flavors of bagels.

- 2** Mr. Romero has 24 crayons. He puts 8 crayons on each table. On how many tables does he put crayons?

$$\text{Repeated subtraction: } \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}}$$

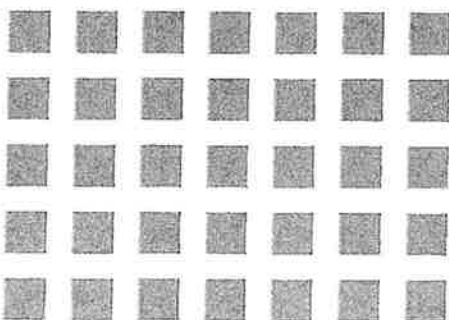
$$\text{Division: } \underline{\hspace{2cm}}$$

Mr. Romero puts crayons on 3 tables.

## Represent Division with Arrays

An **array** shows objects arranged in equal rows and columns. You can use arrays to represent division.

Paavo pins 35 photos to a corkboard. He arranges them in 5 equal rows. How many photos are in each row? Make an array to show equal groups.



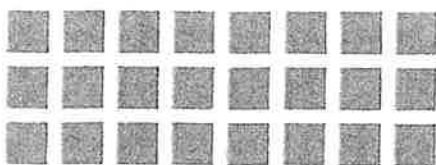
35 photos; 5 equal  
rows; 7 in each row

The array shows  
 $35 \div 5 = 7$ .

There are 7 photos in each row.

**Make an array. Write a division equation.**

- 1** Fahima places 24 plates on a table. She arranges them in rows with 8 plates in each row. How many rows of plates does Fahima make?



\_\_\_\_\_ rows of plates

- 2** J.P. plants 36 seeds in the garden. He arranges them in 4 equal rows. How many seeds does he plant in each row?

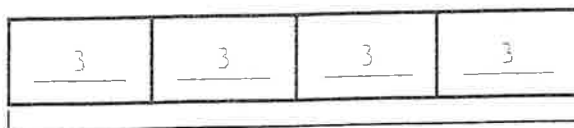
\_\_\_\_\_ seeds in each row

## Represent Division with Bar Models

Karen has 12 feet of rope. She cuts the rope into 4 equal pieces. How can you use a bar model to find the length of each piece of rope?

- A. Draw 4 equal boxes to represent the 4 equal pieces and the total length.
- B. Write a number in each box to show the length of each piece of rope.

Think:  $\square + \square + \square + \square = 12$

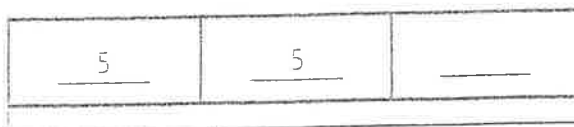


12 feet

- C. Write a division equation to model the problem.
- $12 \div 4 = \underline{3}$

Each piece of rope is 3 feet long.

- 1 Cedric has a roll of wrapping paper that is 15 feet long. He cuts the paper into 3 equal pieces. How long is each piece of paper? Complete the bar model. Solve.



15 feet

Each piece of paper is \_\_\_\_\_ feet long.

- 2 Diana cuts a 28-inch piece of ribbon into 4 equal pieces. How long is each piece of ribbon?

Each piece of ribbon is \_\_\_\_\_ inches long.



## Apply Division Rules for 1 and 0

Traig has 7 pieces of pita bread and 7 napkins. He puts an equal number of pieces of pita bread on each napkin. How many pieces of pita bread are on each napkin?



$$7 \div 7 = \underline{1}$$

There is 1 piece of pita bread on each napkin.

Shannon divides 0 cheese slices equally onto 7 pieces of pita bread. How many cheese slices are on each piece of pita bread?

$$0 \div 7 = \underline{0}$$

There are 0 cheese slices on each piece of pita bread.

Any number (except 0) divided by itself equals 1. Any number divided by 1 equals that number.

Zero divided by any number (except 0) equals 0. You cannot divide by 0.

**Divide. Find the quotient.**

**1**  $6 \div 1 = \underline{\quad}$

**2**  $0 \div 10 = \underline{\quad}$

**3**  $0 \div 6 = \underline{\quad}$

**4**  $9 \div 9 = \underline{\quad}$

**5**  $8 \div 1 = \underline{\quad}$

**6**  $10 \div 10 = \underline{\quad}$

- 7** Molly makes 5 sandwiches. She puts an equal number of sandwiches on each of 5 plates. How many sandwiches does Molly put on each plate?

Write a division equation. Solve.

\_\_\_\_\_ sandwich

Name \_\_\_\_\_

**Fluency  
Maintenance**  
Addition

**Add.**

**1**  $5 + 6 = \underline{\quad}$

**2**  $8 + 7 = \underline{\quad}$

**3**  $10 + 4 = \underline{\quad}$

**4**  $\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$

**5**  $\begin{array}{r} 10 \\ + 6 \\ \hline \end{array}$

**6**  $\begin{array}{r} 7 \\ + 10 \\ \hline \end{array}$

**7**  $\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$

**8**  $\begin{array}{r} 8 \\ + 6 \\ \hline \end{array}$

**9**  $8 + 8 = \underline{\quad}$

**10**  $10 + 5 = \underline{\quad}$

**11**  $3 + 9 = \underline{\quad}$

**12**  $\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$

**13**  $\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$

**14**  $\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$

**15**  $\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$

**16**  $\begin{array}{r} 10 \\ + 9 \\ \hline \end{array}$

**17**  $10 + 3 = \underline{\quad}$

**18**  $7 + 7 = \underline{\quad}$

**19**  $4 + 8 = \underline{\quad}$

**20**  $\begin{array}{r} 9 \\ + 10 \\ \hline \end{array}$

**21**  $\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$

**22**  $\begin{array}{r} 8 \\ + 3 \\ \hline \end{array}$

**23**  $\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$

**24**  $\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$

Name \_\_\_\_\_

**Fluency  
Maintenance**  
Subtraction

**Subtract.**

**1**  $12 - 7 =$  \_\_\_\_\_

**2**  $18 - 9 =$  \_\_\_\_\_

**3**  $14 - 9 =$  \_\_\_\_\_

**4** 
$$\begin{array}{r} 15 \\ - 8 \\ \hline \end{array}$$

**5** 
$$\begin{array}{r} 13 \\ - 8 \\ \hline \end{array}$$

**6** 
$$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$$

**7** 
$$\begin{array}{r} 16 \\ - 9 \\ \hline \end{array}$$

**8** 
$$\begin{array}{r} 14 \\ - 7 \\ \hline \end{array}$$

**9**  $14 - 5 =$  \_\_\_\_\_

**10**  $11 - 4 =$  \_\_\_\_\_

**11**  $13 - 9 =$  \_\_\_\_\_

**12** 
$$\begin{array}{r} 12 \\ - 9 \\ \hline \end{array}$$

**13** 
$$\begin{array}{r} 18 \\ - 8 \\ \hline \end{array}$$

**14** 
$$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$$

**15** 
$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

**16** 
$$\begin{array}{r} 11 \\ - 2 \\ \hline \end{array}$$

**17**  $19 - 10 =$  \_\_\_\_\_

**18**  $15 - 6 =$  \_\_\_\_\_

**19**  $16 - 7 =$  \_\_\_\_\_

**20** 
$$\begin{array}{r} 13 \\ - 6 \\ \hline \end{array}$$

**21** 
$$\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$$

**22** 
$$\begin{array}{r} 14 \\ - 8 \\ \hline \end{array}$$

**23** 
$$\begin{array}{r} 19 \\ - 9 \\ \hline \end{array}$$

**24** 
$$\begin{array}{r} 13 \\ - 5 \\ \hline \end{array}$$

Name \_\_\_\_\_

**Fluency  
Maintenance**  
Addition and Subtraction

**Add or subtract.**

**1**    10  
+ 7

**2**    13  
- 4

**3**    12  
- 8

**4**    4  
+ 10

**5**    9  
+ 6

**6**  $10 - 9 =$  \_\_\_\_\_

**7**  $11 - 3 =$  \_\_\_\_\_

**8**  $7 + 9 =$  \_\_\_\_\_

**9**    14  
- 6

**10**    6  
+ 3

**11**    9  
- 2

**12**    9  
+ 7

**13**    17  
- 7

**14**  $13 - 7 =$  \_\_\_\_\_

**15**  $8 + 4 =$  \_\_\_\_\_

**16**  $10 - 3 =$  \_\_\_\_\_

**17**    5  
+ 9

**18**    6  
+ 8

**19**    12  
- 3

**20**    7  
+ 6

**21**    11  
- 9

**22**  $12 - 5 =$  \_\_\_\_\_

**23**  $6 + 7 =$  \_\_\_\_\_

**24**  $16 - 8 =$  \_\_\_\_\_

Name \_\_\_\_\_

## Fluency Builder

Multiplication with 2 and 5

Multiply.

$$\begin{array}{r} 1 \quad 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 0 \\ \times 5 \\ \hline \end{array}$$

$$6 \quad 8 \times 2 = \underline{\quad}$$

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

$$8 \quad 4 \times 5 = \underline{\quad}$$

$$\begin{array}{r} 9 \quad 9 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 7 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 6 \\ \times 2 \\ \hline \end{array}$$

$$14 \quad 1 \times 2 = \underline{\quad}$$

$$15 \quad 10 \times 5 = \underline{\quad}$$

$$16 \quad 10 \times 2 = \underline{\quad}$$

$$\begin{array}{r} 17 \quad 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 9 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 5 \\ \times 5 \\ \hline \end{array}$$

$$22 \quad 2 \times 1 = \underline{\quad}$$

$$23 \quad 8 \times 5 = \underline{\quad}$$

$$24 \quad 5 \times 10 = \underline{\quad}$$

Name \_\_\_\_\_

## Fluency Builder

Multiplication with 9 and 10

Multiply.

$$\begin{array}{r} 1 \quad 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 1 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 3 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 5 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 10 \\ \times 4 \\ \hline \end{array}$$

$$6 \quad 8 \times 10 = \underline{\hspace{2cm}}$$

$$7 \quad 3 \times 9 = \underline{\hspace{2cm}}$$

$$8 \quad 10 \times 7 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 9 \quad 8 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 1 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 6 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 10 \\ \times 1 \\ \hline \end{array}$$

$$14 \quad 9 \times 10 = \underline{\hspace{2cm}}$$

$$15 \quad 10 \times 10 = \underline{\hspace{2cm}}$$

$$16 \quad 7 \times 10 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 17 \quad 4 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 7 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 9 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 8 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 6 \\ \times 9 \\ \hline \end{array}$$

$$22 \quad 9 \times 4 = \underline{\hspace{2cm}}$$

$$23 \quad 3 \times 10 = \underline{\hspace{2cm}}$$

$$24 \quad 9 \times 9 = \underline{\hspace{2cm}}$$

Name \_\_\_\_\_

## Fluency Builder

Multiplication with 3 and 4

Multiply.

$$\begin{array}{r} 1 \quad 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 6 \\ \times 3 \\ \hline \end{array}$$

$$6 \quad 3 \times 5 = \underline{\hspace{2cm}}$$

$$7 \quad 2 \times 4 = \underline{\hspace{2cm}}$$

$$8 \quad 4 \times 7 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 9 \quad 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 4 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 3 \\ \times 7 \\ \hline \end{array}$$

$$14 \quad 9 \times 3 = \underline{\hspace{2cm}}$$

$$15 \quad 8 \times 3 = \underline{\hspace{2cm}}$$

$$16 \quad 4 \times 4 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 17 \quad 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 3 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 10 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 2 \\ \times 4 \\ \hline \end{array}$$

$$22 \quad 7 \times 4 = \underline{\hspace{2cm}}$$

$$23 \quad 3 \times 9 = \underline{\hspace{2cm}}$$

$$24 \quad 10 \times 3 = \underline{\hspace{2cm}}$$

Name \_\_\_\_\_

## Fluency Builder

Multiplication with 1 and 0

Multiply.

$$\begin{array}{r} 1 \quad 2 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 3 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 4 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 1 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 0 \\ \times 6 \\ \hline \end{array}$$

$$6 \quad 5 \times 1 = \underline{\hspace{2cm}}$$

$$7 \quad 0 \times 7 = \underline{\hspace{2cm}}$$

$$8 \quad 1 \times 3 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 9 \quad 1 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 8 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 1 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 2 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 6 \\ \times 1 \\ \hline \end{array}$$

$$14 \quad 0 \times 6 = \underline{\hspace{2cm}}$$

$$15 \quad 6 \times 1 = \underline{\hspace{2cm}}$$

$$16 \quad 0 \times 3 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 17 \quad 0 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 8 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 0 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 0 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 9 \\ \times 0 \\ \hline \end{array}$$

$$22 \quad 0 \times 5 = \underline{\hspace{2cm}}$$

$$23 \quad 4 \times 1 = \underline{\hspace{2cm}}$$

$$24 \quad 0 \times 4 = \underline{\hspace{2cm}}$$



Name \_\_\_\_\_

## Fluency Builder

Multiplication with 6, 7, and 8

Multiply.

$$\begin{array}{r} 1 \quad 2 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 2 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 1 \\ \times 8 \\ \hline \end{array}$$

$$6 \quad 3 \times 8 = \underline{\quad}$$

$$7 \quad 6 \times 8 = \underline{\quad}$$

$$8 \quad 5 \times 6 = \underline{\quad}$$

$$\begin{array}{r} 9 \quad 6 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 1 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 9 \\ \times 7 \\ \hline \end{array}$$

$$14 \quad 6 \times 5 = \underline{\quad}$$

$$15 \quad 7 \times 7 = \underline{\quad}$$

$$16 \quad 8 \times 9 = \underline{\quad}$$

$$\begin{array}{r} 17 \quad 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 4 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 6 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 8 \\ \times 1 \\ \hline \end{array}$$

$$22 \quad 10 \times 6 = \underline{\quad}$$

$$23 \quad 8 \times 8 = \underline{\quad}$$

$$24 \quad 7 \times 8 = \underline{\quad}$$

Name \_\_\_\_\_

**Fluency Builder**  
Multiplication Level 1

**Multiply.**

**1**  $1 \times 9 = \underline{\hspace{2cm}}$

**2**  $2 \times 8 = \underline{\hspace{2cm}}$

**3**  $5 \times 4 = \underline{\hspace{2cm}}$

**4**  $\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$

**5**  $\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$

**6**  $\begin{array}{r} 7 \\ \times 6 \\ \hline \end{array}$

**7**  $\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$

**8**  $\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$

**9**  $1 \times 5 = \underline{\hspace{2cm}}$

**10**  $9 \times 2 = \underline{\hspace{2cm}}$

**11**  $6 \times 4 = \underline{\hspace{2cm}}$

**12**  $\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$

**13**  $\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$

**14**  $\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$

**15**  $\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$

**16**  $\begin{array}{r} 1 \\ \times 0 \\ \hline \end{array}$

**17**  $7 \times 10 = \underline{\hspace{2cm}}$

**18**  $6 \times 9 = \underline{\hspace{2cm}}$

**19**  $8 \times 5 = \underline{\hspace{2cm}}$

**20**  $\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$

**21**  $\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$

**22**  $\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$

**23**  $\begin{array}{r} 0 \\ \times 4 \\ \hline \end{array}$

**24**  $\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$

Name \_\_\_\_\_

**Fluency Builder**  
Multiplication Level 2

**Multiply.**

**1**  $7 \times \underline{\quad} = 35$

**2**  $6 \times \underline{\quad} = 18$

**3**  $5 \times \underline{\quad} = 40$

**4**  $\underline{\quad} \times 4 = 32$

**5**  $\underline{\quad} \times 6 = 12$

**6**  $7 \times \underline{\quad} = 56$

**7**  $\underline{\quad} \times 8 = 48$

**8**  $7 \times \underline{\quad} = 0$

**9**  $9 \times \underline{\quad} = 54$

**10**  $\underline{\quad} \times 4 = 40$

**11**  $\underline{\quad} \times 2 = 14$

**12**  $\underline{\quad} \times 5 = 10$

**13**  $8 \times \underline{\quad} = 24$

**14**  $4 \times \underline{\quad} = 36$

**15**  $\underline{\quad} \times 6 = 6$

**16**  $\underline{\quad} \times 9 = 81$

**17**  $9 \times \underline{\quad} = 63$

**18**  $\underline{\quad} \times 9 = 45$

**19**  $9 \times \underline{\quad} = 72$

**20**  $\underline{\quad} \times 8 = 80$

**21**  $7 \times \underline{\quad} = 49$

**22**  $4 \times \underline{\quad} = 16$

**23**  $8 \times \underline{\quad} = 16$

**24**  $\underline{\quad} \times 10 = 50$

Name \_\_\_\_\_

**Fluency Builder**  
Division with 2 and 5

**Divide.**

**1**  $14 \div 2 = \underline{\quad}$

**2**  $25 \div 5 = \underline{\quad}$

**3**  $35 \div 5 = \underline{\quad}$

**4**  $20 \div 5 = \underline{\quad}$

**5**  $18 \div 2 = \underline{\quad}$

**6**  $45 \div 5 = \underline{\quad}$

**7**  $50 \div 5 = \underline{\quad}$

**8**  $10 \div 2 = \underline{\quad}$

**9**  $4 \div 2 = \underline{\quad}$

**10**  $30 \div 5 = \underline{\quad}$

**11**  $15 \div 5 = \underline{\quad}$

**12**  $5 \div 5 = \underline{\quad}$

**13**  $12 \div 2 = \underline{\quad}$

**14**  $8 \div 2 = \underline{\quad}$

**15**  $2 \div 2 = \underline{\quad}$

**16**  $2 \overline{)6}$

**17**  $5 \overline{)45}$

**18**  $2 \overline{)14}$

**19**  $2 \overline{)20}$

**20**  $5 \overline{)35}$

**21**  $2 \overline{)6}$

**22**  $5 \overline{)20}$

**23**  $2 \overline{)16}$

**24**  $5 \overline{)25}$

**25**  $5 \overline{)40}$

**Divide.**

**1**  $20 \div 10 = \underline{\quad}$

**2**  $9 \div 9 = \underline{\quad}$

**3**  $30 \div 10 = \underline{\quad}$

**4**  $40 \div 10 = \underline{\quad}$

**5**  $54 \div 9 = \underline{\quad}$

**6**  $70 \div 10 = \underline{\quad}$

**7**  $80 \div 10 = \underline{\quad}$

**8**  $63 \div 9 = \underline{\quad}$

**9**  $72 \div 9 = \underline{\quad}$

**10**  $50 \div 10 = \underline{\quad}$

**11**  $27 \div 9 = \underline{\quad}$

**12**  $90 \div 9 = \underline{\quad}$

**13**  $90 \div 10 = \underline{\quad}$

**14**  $81 \div 9 = \underline{\quad}$

**15**  $100 \div 10 = \underline{\quad}$

**16**  $10 \overline{)10}$

**17**  $9 \overline{)27}$

**18**  $10 \overline{)60}$

**19**  $9 \overline{)18}$

**20**  $9 \overline{)45}$

**21**  $9 \overline{)36}$

**22**  $10 \overline{)50}$

**23**  $9 \overline{)81}$

**24**  $10 \overline{)30}$

**25**  $10 \overline{)80}$

Name \_\_\_\_\_

## Fluency Builder

Division with 3 and 4

Divide.

1  $12 \div 3 =$  \_\_\_\_\_

2  $8 \div 4 =$  \_\_\_\_\_

3  $24 \div 3 =$  \_\_\_\_\_

4  $3 \div 3 =$  \_\_\_\_\_

5  $6 \div 3 =$  \_\_\_\_\_

6  $18 \div 3 =$  \_\_\_\_\_

7  $27 \div 3 =$  \_\_\_\_\_

8  $40 \div 4 =$  \_\_\_\_\_

9  $9 \div 3 =$  \_\_\_\_\_

10  $12 \div 4 =$  \_\_\_\_\_

11  $21 \div 3 =$  \_\_\_\_\_

12  $4 \div 4 =$  \_\_\_\_\_

13  $28 \div 4 =$  \_\_\_\_\_

14  $20 \div 4 =$  \_\_\_\_\_

15  $32 \div 4 =$  \_\_\_\_\_

16  $3 \overline{)27}$

17  $4 \overline{)8}$

18  $3 \overline{)30}$

19  $4 \overline{)36}$

20  $4 \overline{)16}$

21  $3 \overline{)21}$

22  $4 \overline{)20}$

23  $3 \overline{)9}$

24  $3 \overline{)15}$

25  $4 \overline{)24}$

Name \_\_\_\_\_

## Fluency Builder

Division with 0 and 1

Divide.

**1**  $0 \div 4 =$  \_\_\_\_\_

**2**  $9 \div 1 =$  \_\_\_\_\_

**3**  $5 \div 5 =$  \_\_\_\_\_

**4**  $7 \div 1 =$  \_\_\_\_\_

**5**  $0 \div 3 =$  \_\_\_\_\_

**6**  $6 \div 6 =$  \_\_\_\_\_

**7**  $5 \div 1 =$  \_\_\_\_\_

**8**  $0 \div 7 =$  \_\_\_\_\_

**9**  $0 \div 5 =$  \_\_\_\_\_

**10**  $2 \div 1 =$  \_\_\_\_\_

**11**  $0 \div 6 =$  \_\_\_\_\_

**12**  $8 \div 1 =$  \_\_\_\_\_

**13**  $4 \div 4 =$  \_\_\_\_\_

**14**  $6 \div 1 =$  \_\_\_\_\_

**15**  $0 \div 1 =$  \_\_\_\_\_

**16**  $1 \overline{)3}$

**17**  $1 \overline{)1}$

**18**  $2 \overline{)0}$

**19**  $10 \overline{)10}$

**20**  $9 \overline{)0}$

**21**  $1 \overline{)10}$

**22**  $3 \overline{)3}$

**23**  $7 \overline{)7}$

**24**  $1 \overline{)4}$

**25**  $8 \overline{)8}$

Name \_\_\_\_\_

## Fluency Builder

Division with 6, 7, and 8

**Divide.**

**1**  $12 \div 6 = \underline{\quad}$

**2**  $21 \div 7 = \underline{\quad}$

**3**  $24 \div 8 = \underline{\quad}$

**4**  $64 \div 8 = \underline{\quad}$

**5**  $18 \div 6 = \underline{\quad}$

**6**  $40 \div 8 = \underline{\quad}$

**7**  $6 \div 6 = \underline{\quad}$

**8**  $63 \div 7 = \underline{\quad}$

**9**  $56 \div 8 = \underline{\quad}$

**10**  $36 \div 6 = \underline{\quad}$

**11**  $70 \div 7 = \underline{\quad}$

**12**  $48 \div 6 = \underline{\quad}$

**13**  $24 \div 6 = \underline{\quad}$

**14**  $32 \div 8 = \underline{\quad}$

**15**  $7 \div 7 = \underline{\quad}$

**16**  $7 \overline{)28}$

**17**  $8 \overline{)80}$

**18**  $7 \overline{)56}$

**19**  $8 \overline{)48}$

**20**  $6 \overline{)30}$

**21**  $7 \overline{)35}$

**22**  $8 \overline{)8}$

**23**  $7 \overline{)42}$

**24**  $8 \overline{)72}$

**25**  $6 \overline{)60}$



Divide.

**1**  $18 \div 2 = \underline{\quad}$

**2**  $24 \div 6 = \underline{\quad}$

**3**  $28 \div 7 = \underline{\quad}$

**4**  $16 \div 4 = \underline{\quad}$

**5**  $56 \div 8 = \underline{\quad}$

**6**  $36 \div 9 = \underline{\quad}$

**7**  $35 \div 7 = \underline{\quad}$

**8**  $9 \div 1 = \underline{\quad}$

**9**  $42 \div 6 = \underline{\quad}$

**10**  $40 \div 10 = \underline{\quad}$

**11**  $0 \div 6 = \underline{\quad}$

**12**  $40 \div 8 = \underline{\quad}$

**13**  $5 \overline{)45}$

**14**  $3 \overline{)24}$

**15**  $7 \overline{)42}$

**16**  $4 \overline{)24}$

**17**  $9 \overline{)63}$

**18**  $6 \overline{)30}$

**19**  $2 \overline{)12}$

**20**  $3 \overline{)30}$

**21**  $8 \overline{)24}$

**22**  $7 \overline{)49}$

**23**  $9 \overline{)72}$

**24**  $9 \overline{)9}$

**25**  $4 \overline{)28}$

**26**  $8 \overline{)48}$

**27**  $10 \overline{)100}$

Name \_\_\_\_\_

## Fluency Builder

Multiplication and Division

Multiply or divide.

1  $5 \times 2 = \underline{\quad}$

2  $6 \div 3 = \underline{\quad}$

3  $4 \div 2 = \underline{\quad}$

4 
$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

5  $5 \overline{)30}$

6 
$$\begin{array}{r} 9 \\ \times 1 \\ \hline \end{array}$$

7  $4 \overline{)40}$

8 
$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

9  $10 \div 5 = \underline{\quad}$

10  $2 \times 7 = \underline{\quad}$

11  $7 \times 1 = \underline{\quad}$

12  $9 \times 10 = \underline{\quad}$

13  $7 \overline{)28}$

14 
$$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$$

15  $3 \overline{)12}$

16  $18 \div 6 = \underline{\quad}$

17 
$$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$$

18 
$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

19 
$$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$$

20 
$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

21  $9 \overline{)72}$

22 
$$\begin{array}{r} 10 \\ \times 6 \\ \hline \end{array}$$

23  $8 \overline{)80}$

24 
$$\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$$

Name \_\_\_\_\_

## Fluency Builder

Addition Level 1

Add.

$$\begin{array}{r} \text{1} \quad 314 \\ + 282 \\ \hline \end{array}$$

$$\begin{array}{r} \text{2} \quad 253 \\ + 115 \\ \hline \end{array}$$

$$\begin{array}{r} \text{3} \quad 406 \\ + 52 \\ \hline \end{array}$$

$$\begin{array}{r} \text{4} \quad 147 \\ + 350 \\ \hline \end{array}$$

$$\begin{array}{r} \text{5} \quad 295 \\ + 403 \\ \hline \end{array}$$

$$\begin{array}{r} \text{6} \quad 711 \\ + 222 \\ \hline \end{array}$$

$$\begin{array}{r} \text{7} \quad 415 \\ + 360 \\ \hline \end{array}$$

$$\begin{array}{r} \text{8} \quad 158 \\ + 421 \\ \hline \end{array}$$

$$\begin{array}{r} \text{9} \quad 103 \\ + 282 \\ \hline \end{array}$$

$$\begin{array}{r} \text{10} \quad 254 \\ + 244 \\ \hline \end{array}$$

$$\begin{array}{r} \text{11} \quad 224 \\ + 518 \\ \hline \end{array}$$

$$\begin{array}{r} \text{12} \quad 856 \\ + 104 \\ \hline \end{array}$$

$$\begin{array}{r} \text{13} \quad 329 \\ + 468 \\ \hline \end{array}$$

$$\begin{array}{r} \text{14} \quad 734 \\ + 37 \\ \hline \end{array}$$

$$\begin{array}{r} \text{15} \quad 682 \\ + 108 \\ \hline \end{array}$$

$$\begin{array}{r} \text{16} \quad 331 \\ + 49 \\ \hline \end{array}$$

$$\begin{array}{r} \text{17} \quad 542 \\ + 439 \\ \hline \end{array}$$

$$\begin{array}{r} \text{18} \quad 526 \\ + 246 \\ \hline \end{array}$$

$$\begin{array}{r} \text{19} \quad 116 \\ + 535 \\ \hline \end{array}$$

$$\begin{array}{r} \text{20} \quad 475 \\ + 217 \\ \hline \end{array}$$

$$\begin{array}{r} \text{21} \quad 363 \\ + 327 \\ \hline \end{array}$$

$$\begin{array}{r} \text{22} \quad 65 \\ + 319 \\ \hline \end{array}$$

$$\begin{array}{r} \text{23} \quad 740 \\ + 140 \\ \hline \end{array}$$

$$\begin{array}{r} \text{24} \quad 219 \\ + 780 \\ \hline \end{array}$$

$$\begin{array}{r} \text{25} \quad 219 \\ + 319 \\ \hline \end{array}$$

Name \_\_\_\_\_

## Fluency Builder

Addition Level 2

Add.

$$\begin{array}{r} \text{1} \quad 434 \\ + 517 \\ \hline \end{array}$$

$$\begin{array}{r} \text{2} \quad 605 \\ + 205 \\ \hline \end{array}$$

$$\begin{array}{r} \text{3} \quad 327 \\ + 248 \\ \hline \end{array}$$

$$\begin{array}{r} \text{4} \quad 742 \\ + 129 \\ \hline \end{array}$$

$$\begin{array}{r} \text{5} \quad 924 \\ + 28 \\ \hline \end{array}$$

$$\begin{array}{r} \text{6} \quad 793 \\ + 111 \\ \hline \end{array}$$

$$\begin{array}{r} \text{7} \quad 444 \\ + 282 \\ \hline \end{array}$$

$$\begin{array}{r} \text{8} \quad 562 \\ + 55 \\ \hline \end{array}$$

$$\begin{array}{r} \text{9} \quad 334 \\ + 284 \\ \hline \end{array}$$

$$\begin{array}{r} \text{10} \quad 698 \\ + 240 \\ \hline \end{array}$$

$$\begin{array}{r} \text{11} \quad 286 \\ + 147 \\ \hline \end{array}$$

$$\begin{array}{r} \text{12} \quad 173 \\ + 567 \\ \hline \end{array}$$

$$\begin{array}{r} \text{13} \quad 638 \\ + 169 \\ \hline \end{array}$$

$$\begin{array}{r} \text{14} \quad 835 \\ + 96 \\ \hline \end{array}$$

$$\begin{array}{r} \text{15} \quad 304 \\ + 99 \\ \hline \end{array}$$

$$\begin{array}{r} \text{16} \quad 575 \\ + 248 \\ \hline \end{array}$$

$$\begin{array}{r} \text{17} \quad 69 \\ + 734 \\ \hline \end{array}$$

$$\begin{array}{r} \text{18} \quad 359 \\ + 269 \\ \hline \end{array}$$

$$\begin{array}{r} \text{19} \quad 727 \\ + 186 \\ \hline \end{array}$$

$$\begin{array}{r} \text{20} \quad 117 \\ + 685 \\ \hline \end{array}$$

$$\begin{array}{r} \text{21} \quad 356 \\ + 519 \\ \hline \end{array}$$

$$\begin{array}{r} \text{22} \quad 582 \\ + 151 \\ \hline \end{array}$$

$$\begin{array}{r} \text{23} \quad 795 \\ + 39 \\ \hline \end{array}$$

$$\begin{array}{r} \text{24} \quad 264 \\ + 291 \\ \hline \end{array}$$

$$\begin{array}{r} \text{25} \quad 221 \\ + 679 \\ \hline \end{array}$$

Name \_\_\_\_\_

# Fluency Builder

Subtraction Level 1

Subtract.

$$\begin{array}{r} \text{1} \quad 428 \\ - 316 \\ \hline \end{array}$$

$$\begin{array}{r} \text{2} \quad 537 \\ - 204 \\ \hline \end{array}$$

$$\begin{array}{r} \text{3} \quad 890 \\ - 370 \\ \hline \end{array}$$

$$\begin{array}{r} \text{4} \quad 607 \\ - 401 \\ \hline \end{array}$$

$$\begin{array}{r} \text{5} \quad 788 \\ - 361 \\ \hline \end{array}$$

$$\begin{array}{r} \text{6} \quad 558 \\ - 142 \\ \hline \end{array}$$

$$\begin{array}{r} \text{7} \quad 936 \\ - 713 \\ \hline \end{array}$$

$$\begin{array}{r} \text{8} \quad 769 \\ - 45 \\ \hline \end{array}$$

$$\begin{array}{r} \text{9} \quad 451 \\ - 130 \\ \hline \end{array}$$

$$\begin{array}{r} \text{10} \quad 234 \\ - 123 \\ \hline \end{array}$$

$$\begin{array}{r} \text{11} \quad 972 \\ - 647 \\ \hline \end{array}$$

$$\begin{array}{r} \text{12} \quad 760 \\ - 248 \\ \hline \end{array}$$

$$\begin{array}{r} \text{13} \quad 826 \\ - 417 \\ \hline \end{array}$$

$$\begin{array}{r} \text{14} \quad 858 \\ - 239 \\ \hline \end{array}$$

$$\begin{array}{r} \text{15} \quad 635 \\ - 116 \\ \hline \end{array}$$

$$\begin{array}{r} \text{16} \quad 935 \\ - 443 \\ \hline \end{array}$$

$$\begin{array}{r} \text{17} \quad 846 \\ - 372 \\ \hline \end{array}$$

$$\begin{array}{r} \text{18} \quad 824 \\ - 132 \\ \hline \end{array}$$

$$\begin{array}{r} \text{19} \quad 577 \\ - 285 \\ \hline \end{array}$$

$$\begin{array}{r} \text{20} \quad 139 \\ - 64 \\ \hline \end{array}$$

$$\begin{array}{r} \text{21} \quad 370 \\ - 151 \\ \hline \end{array}$$

$$\begin{array}{r} \text{22} \quad 749 \\ - 123 \\ \hline \end{array}$$

$$\begin{array}{r} \text{23} \quad 637 \\ - 552 \\ \hline \end{array}$$

$$\begin{array}{r} \text{24} \quad 784 \\ - 64 \\ \hline \end{array}$$

$$\begin{array}{r} \text{25} \quad 973 \\ - 237 \\ \hline \end{array}$$

Name \_\_\_\_\_

## Fluency Builder

### Subtraction Level 2

Subtract.

$$\begin{array}{r} \text{1} \quad 561 \\ - 313 \\ \hline \end{array}$$

$$\begin{array}{r} \text{2} \quad 692 \\ - 219 \\ \hline \end{array}$$

$$\begin{array}{r} \text{3} \quad 473 \\ - 265 \\ \hline \end{array}$$

$$\begin{array}{r} \text{4} \quad 864 \\ - 236 \\ \hline \end{array}$$

$$\begin{array}{r} \text{5} \quad 152 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} \text{6} \quad 923 \\ - 761 \\ \hline \end{array}$$

$$\begin{array}{r} \text{7} \quad 872 \\ - 690 \\ \hline \end{array}$$

$$\begin{array}{r} \text{8} \quad 728 \\ - 445 \\ \hline \end{array}$$

$$\begin{array}{r} \text{9} \quad 607 \\ - 63 \\ \hline \end{array}$$

$$\begin{array}{r} \text{10} \quad 459 \\ - 185 \\ \hline \end{array}$$

$$\begin{array}{r} \text{11} \quad 313 \\ - 268 \\ \hline \end{array}$$

$$\begin{array}{r} \text{12} \quad 804 \\ - 567 \\ \hline \end{array}$$

$$\begin{array}{r} \text{13} \quad 350 \\ - 162 \\ \hline \end{array}$$

$$\begin{array}{r} \text{14} \quad 416 \\ - 279 \\ \hline \end{array}$$

$$\begin{array}{r} \text{15} \quad 613 \\ - 369 \\ \hline \end{array}$$

$$\begin{array}{r} \text{16} \quad 811 \\ - 204 \\ \hline \end{array}$$

$$\begin{array}{r} \text{17} \quad 655 \\ - 374 \\ \hline \end{array}$$

$$\begin{array}{r} \text{18} \quad 313 \\ - 187 \\ \hline \end{array}$$

$$\begin{array}{r} \text{19} \quad 808 \\ - 775 \\ \hline \end{array}$$

$$\begin{array}{r} \text{20} \quad 964 \\ - 689 \\ \hline \end{array}$$

$$\begin{array}{r} \text{21} \quad 467 \\ - 275 \\ \hline \end{array}$$

$$\begin{array}{r} \text{22} \quad 572 \\ - 364 \\ \hline \end{array}$$

$$\begin{array}{r} \text{23} \quad 394 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} \text{24} \quad 940 \\ - 451 \\ \hline \end{array}$$

$$\begin{array}{r} \text{25} \quad 473 \\ - 396 \\ \hline \end{array}$$

Add.

**1**  $321 + 847 = \underline{\hspace{2cm}}$

**2**  $1,348 + 332 = \underline{\hspace{2cm}}$

**3**  $871 + 142 = \underline{\hspace{2cm}}$

**4**  $513 + 487 = \underline{\hspace{2cm}}$

**5** 
$$\begin{array}{r} 364 \\ + 757 \\ \hline \end{array}$$

**6** 
$$\begin{array}{r} 192 \\ + 839 \\ \hline \end{array}$$

**7** 
$$\begin{array}{r} 1,176 \\ + 449 \\ \hline \end{array}$$

**8** 
$$\begin{array}{r} 647 \\ + 453 \\ \hline \end{array}$$

**9**  $576 + 715 = \underline{\hspace{2cm}}$

**10**  $1,226 + 757 = \underline{\hspace{2cm}}$

**11**  $445 + 609 = \underline{\hspace{2cm}}$

**12**  $815 + 366 = \underline{\hspace{2cm}}$

**13** 
$$\begin{array}{r} 947 \\ + 544 \\ \hline \end{array}$$

**14** 
$$\begin{array}{r} 432 \\ + 992 \\ \hline \end{array}$$

**15** 
$$\begin{array}{r} 1,000 \\ + 264 \\ \hline \end{array}$$

**16** 
$$\begin{array}{r} 875 \\ + 432 \\ \hline \end{array}$$

**17** 
$$\begin{array}{r} 861 \\ + 897 \\ \hline \end{array}$$

**18** 
$$\begin{array}{r} 698 \\ + 509 \\ \hline \end{array}$$

**19** 
$$\begin{array}{r} 289 \\ + 884 \\ \hline \end{array}$$

**20** 
$$\begin{array}{r} 598 \\ + 787 \\ \hline \end{array}$$

Name \_\_\_\_\_

**Fluency Starter**  
Subtraction

**Subtract.**

**1**  $1,962 - 953 = \underline{\hspace{2cm}}$

**2**  $872 - 656 = \underline{\hspace{2cm}}$

**3**  $647 - 348 = \underline{\hspace{2cm}}$

**4**  $1,243 - 600 = \underline{\hspace{2cm}}$

**5** 
$$\begin{array}{r} 414 \\ - 189 \\ \hline \end{array}$$

**6** 
$$\begin{array}{r} 1,828 \\ - 744 \\ \hline \end{array}$$

**7** 
$$\begin{array}{r} 1,784 \\ - 686 \\ \hline \end{array}$$

**8** 
$$\begin{array}{r} 1,105 \\ - 103 \\ \hline \end{array}$$

**9**  $1,637 - 489 = \underline{\hspace{2cm}}$

**10**  $930 - 812 = \underline{\hspace{2cm}}$

**11**  $1,474 - 335 = \underline{\hspace{2cm}}$

**12**  $726 - 487 = \underline{\hspace{2cm}}$

**13** 
$$\begin{array}{r} 1,371 \\ - 800 \\ \hline \end{array}$$

**14** 
$$\begin{array}{r} 1,569 \\ - 639 \\ \hline \end{array}$$

**15** 
$$\begin{array}{r} 1,474 \\ - 300 \\ \hline \end{array}$$

**16** 
$$\begin{array}{r} 881 \\ - 596 \\ \hline \end{array}$$

**17** 
$$\begin{array}{r} 1,697 \\ - 599 \\ \hline \end{array}$$

**18** 
$$\begin{array}{r} 1,745 \\ - 493 \\ \hline \end{array}$$

**19** 
$$\begin{array}{r} 1,987 \\ - 983 \\ \hline \end{array}$$

**20** 
$$\begin{array}{r} 1,188 \\ - 100 \\ \hline \end{array}$$



Name \_\_\_\_\_

**Fluency Starter**  
**Multiplication**

**Multiply.**

**1**  $2 \times 14 =$  \_\_\_\_\_

**2**  $3 \times 32 =$  \_\_\_\_\_

**3**  $4 \times 20 =$  \_\_\_\_\_

**4**  $11 \times 5 =$  \_\_\_\_\_

**5**  $34 \times 2 =$  \_\_\_\_\_

**6**  $10 \times 6 =$  \_\_\_\_\_

**7** 
$$\begin{array}{r} 43 \\ \times 2 \\ \hline \end{array}$$

**8** 
$$\begin{array}{r} 1 \\ \times 89 \\ \hline \end{array}$$

**9** 
$$\begin{array}{r} 23 \\ \times 3 \\ \hline \end{array}$$

**10** 
$$\begin{array}{r} 4 \\ \times 21 \\ \hline \end{array}$$

**11** 
$$\begin{array}{r} 97 \\ \times 0 \\ \hline \end{array}$$

**12**  $4 \times 111 =$  \_\_\_\_\_

**13**  $103 \times 3 =$  \_\_\_\_\_

**14**  $589 \times 0 =$  \_\_\_\_\_

**15**  $100 \times 5 =$  \_\_\_\_\_

**16**  $0 \times 924 =$  \_\_\_\_\_

**17**  $6 \times 100 =$  \_\_\_\_\_

**18** 
$$\begin{array}{r} 798 \\ \times 1 \\ \hline \end{array}$$

**19** 
$$\begin{array}{r} 321 \\ \times 3 \\ \hline \end{array}$$

**20** 
$$\begin{array}{r} 2 \\ \times 431 \\ \hline \end{array}$$

**21** 
$$\begin{array}{r} 0 \\ \times 869 \\ \hline \end{array}$$

**22** 
$$\begin{array}{r} 100 \\ \times 5 \\ \hline \end{array}$$

**23** 
$$\begin{array}{r} 212 \\ \times 4 \\ \hline \end{array}$$

**24** 
$$\begin{array}{r} 156 \\ \times 2 \\ \hline \end{array}$$

**25** 
$$\begin{array}{r} 675 \\ \times 0 \\ \hline \end{array}$$

**26** 
$$\begin{array}{r} 100 \\ \times 9 \\ \hline \end{array}$$

**27** 
$$\begin{array}{r} 3 \\ \times 111 \\ \hline \end{array}$$

Name \_\_\_\_\_

## Fluency Starter

Division

Divide.

**1**  $28 \div 2 = \underline{\hspace{2cm}}$

**2**  $11 \div 1 = \underline{\hspace{2cm}}$

**3**  $90 \div 3 = \underline{\hspace{2cm}}$

**4**  $12 \div 1 = \underline{\hspace{2cm}}$

**5**  $66 \div 6 = \underline{\hspace{2cm}}$

**6**  $77 \div 7 = \underline{\hspace{2cm}}$

**7**  $4 \overline{)48}$

**8**  $3 \overline{)33}$

**9**  $5 \overline{)55}$

**10**  $1 \overline{)88}$

**11**  $9 \overline{)99}$

**12**  $171 \div 1 = \underline{\hspace{2cm}}$

**13**  $120 \div 6 = \underline{\hspace{2cm}}$

**14**  $240 \div 1 = \underline{\hspace{2cm}}$

**15**  $257 \div 1 = \underline{\hspace{2cm}}$

**16**  $916 \div 1 = \underline{\hspace{2cm}}$

**17**  $72 \div 6 = \underline{\hspace{2cm}}$

**18**  $1 \overline{)987}$

**19**  $2 \overline{)38}$

**20**  $4 \overline{)52}$

**21**  $3 \overline{)54}$

**22**  $1 \overline{)672}$

**23**  $5 \overline{)85}$

**24**  $1 \overline{)896}$

**25**  $7 \overline{)70}$

**26**  $4 \overline{)64}$

**27**  $1 \overline{)999}$