

# Modeling Division Using Number Lines

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

Date: \_\_\_\_\_

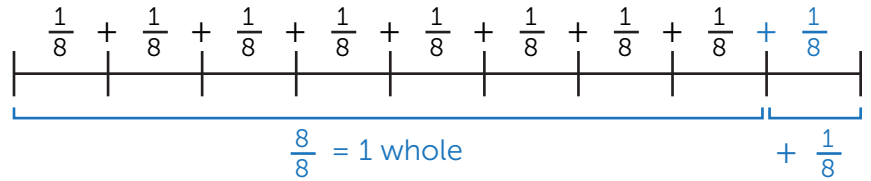
When dividing whole numbers, it can be helpful to show division as a form of multiplication to model the result on a number line. This can be done in three easy steps!

## Consider $9 \div 8$

**Step 1:** Express the division statement  $9 \div 8$  as a multiplication expression:  $9 \times \frac{1}{8}$ .

Observe how:  $9 \div 8 = \frac{9}{8}$   
 $\frac{9}{8} = 9 \times \frac{1}{8}$

**Step 2:** Graph the multiplication expression  $9 \times \frac{1}{8}$  on a number line.



**Step 3:** State the equation, including the quotient:  $9 \div 8 = 1\frac{1}{8}$

## Step One Exercises

Directions: Express each division statement as a multiplication expression.

1.  $8 \div 6 =$  \_\_\_\_\_

2.  $9 \div 2 =$  \_\_\_\_\_

3.  $7 \div 3 =$  \_\_\_\_\_

4.  $12 \div 2 =$  \_\_\_\_\_

5.  $10 \div 3 =$  \_\_\_\_\_

## Step Two Exercises

Directions: Graph the multiplication form of each statement on a number line.

6.  $8 \div 6 =$  \_\_\_\_\_

7.  $9 \div 2 =$  \_\_\_\_\_

8.  $7 \div 3 =$  \_\_\_\_\_

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9.  $12 \div 2 =$



10.  $10 \div 3 =$



## Step Two Exercises

Directions: State the multiplication equation, including the quotient for each exercise.

11.  $8 \div 6 =$

\_\_\_\_\_

12.  $9 \div 2 =$

\_\_\_\_\_

13.  $7 \div 3 =$

\_\_\_\_\_

14.  $12 \div 2 =$

\_\_\_\_\_

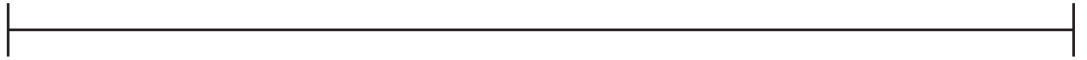
15.  $10 \div 3 =$

\_\_\_\_\_

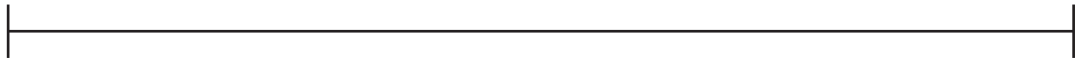
## Try These

Directions: Solve each of the following division expressions using the three-step procedure.

8.  $9 \div 6 =$



9.  $10 \div 2 =$



10.  $8 \div 3 =$

