

**LESSON**  
**2**

## Proportional Relationships

### Reading Strategies: Understand Vocabulary

**Equivalent ratios** are ratios that name the same comparison. The box below shows different ratios. You can find equivalent ratios by multiplying and dividing. Then you can organize them in a table.

$\frac{3}{2}$	6 to 4	$\frac{18}{10}$	15:10	12:8
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Look for equivalent ratios. Start with  $\frac{3}{2}$ . Multiply the numerator and denominator by 2.

$$\frac{3}{2} = \frac{3 \cdot 2}{2 \cdot 2} = \frac{6}{4}$$

The resulting ratio is  $\frac{6}{4}$ . So 6 to 4 is equivalent to  $\frac{3}{2}$ .

Try  $\frac{18}{10}$ . Divide the numerator and denominator by 6.

$$\frac{18}{10} = \frac{18 \div 6}{10 \div 6} = \frac{3}{1.7}$$

The resulting ratio is not  $\frac{3}{2}$ . So  $\frac{18}{10}$  is not equivalent to  $\frac{3}{2}$ .

Try 15:10. Divide each number by 5.

$$15 \div 5 = 3$$

$$10 \div 5 = 2$$

The resulting ratio is 3:2. So 15:10 is equivalent to  $\frac{3}{2}$ .

Try 12:8. Divide each number by 4.

$$12 \div 4 = 3$$

$$8 \div 4 = 2$$

The resulting ratio is 3:2. So 12:8 is equivalent to  $\frac{3}{2}$ .

Organize the equivalent ratios in a table. Write the ratios in order from least terms to greatest terms.

3	6	12	15
2	4	8	10

1. Find the equivalent ratios in the box.

$\frac{25}{35}$	5 to 7	15:21	10 to 15	$\frac{50}{70}$
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Equivalent ratios: \_\_\_\_\_

2. Organize the equivalent ratios in the table in order from least terms to greatest terms.
