

**LESSON**  
**4-3**
**Dividing Mixed Numbers**
**Reteach**

Two numbers are **reciprocals** if their product is 1.

$$\frac{7}{3} \text{ and } \frac{3}{7} \text{ are reciprocals because } \frac{7}{3} \times \frac{3}{7} = 1.$$

Write a mixed number as an improper fraction to find its reciprocal.

$$2\frac{3}{4} \text{ and } \frac{4}{11} \text{ are reciprocals because } 2\frac{3}{4} = \frac{11}{4} \text{ and } \frac{11}{4} \times \frac{4}{11} = 1.$$

To find  $2\frac{3}{4} \div 1\frac{3}{4}$ , first rewrite the mixed numbers as improper fractions.

$$\frac{11}{4} \div \frac{7}{4}$$

Next, rewrite the expression as a multiplication expression and replace the divisor with its reciprocal.

$$\frac{11}{4} \times \frac{4}{7}$$

Solve. Write your answer in simplest form.

$$2\frac{3}{4} \div 1\frac{3}{4} = \frac{11}{4} \div \frac{7}{4} = \frac{11}{4} \times \frac{4}{7} = \frac{11}{7} = 1\frac{4}{7}$$

**Find the reciprocal.**

1.  $\frac{9}{14}$

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2.  $3\frac{1}{2}$

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3.  $10\frac{2}{3}$

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**Complete the division. Write each answer in simplest form.**

4.  $3\frac{3}{5} \div 2\frac{1}{4}$

$$= \frac{18}{5} \div \frac{\quad}{4}$$

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

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5.  $1\frac{1}{2} \div 1\frac{1}{4}$

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

$$= \frac{\quad}{\quad} \times \frac{\quad}{\quad}$$

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6.  $\frac{5}{12} \div 1\frac{7}{8}$

$$= \frac{\quad}{12} \div \frac{\quad}{8}$$

$$= \frac{\quad}{\quad} \times \frac{\quad}{\quad}$$

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7.  $3\frac{1}{8} \div \frac{1}{2}$

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8.  $1\frac{1}{6} \div 2\frac{2}{3}$

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9.  $2 \div 1\frac{1}{5}$

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