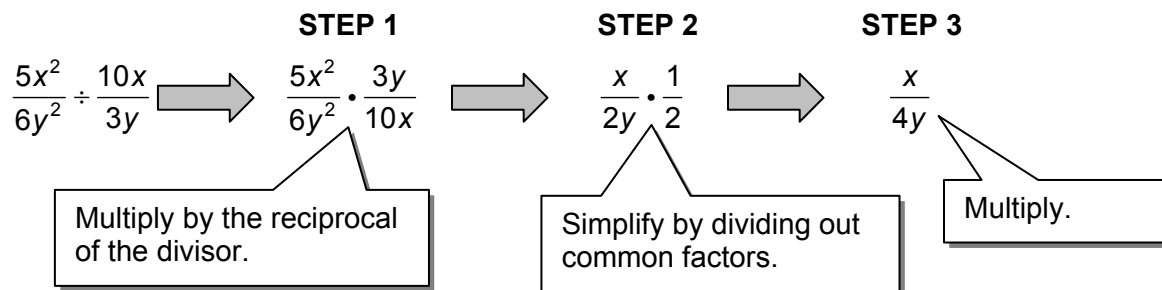


LESSON
9-2

Multiplying and Dividing Rational Expressions

Reading Strategies: Follow a Procedure

Dividing rational expressions can be thought of as multiplying by the reciprocal of the divisor. In order to divide a rational expression, rewrite the division as multiplication, simplify, and multiply.



Answer each question.

1. For $\frac{8}{x-2} \cdot \frac{x}{8}$:

- a. Simplify the expression. _____
- b. For which value of x is the expression undefined? _____
- c. Explain why the expression is undefined for this value.

2. For the expression $\frac{6x^3y^2}{7z^4} \div \frac{2xy^2}{21z^2}$:

- a. Rewrite as multiplication. _____
- b. Simplify. _____
- c. Multiply. _____
- d. For which value is the resulting expression undefined? _____

3. For the expression $\frac{3(x-1)}{2(x+2)} \div \frac{9(x-1)}{4(x+2)}$:

- a. Rewrite as multiplication. _____
- b. Simplify. _____
- c. Multiply. _____

4. Explain how to check the results of division.
