

## 8.2 Multiplication and Division with Rational Expressions

Multiply and reduce, if possible.

a.  $\frac{x+3}{x} \cdot \frac{x-3}{x+5}$

b.  $\frac{x+5}{7x} \cdot \frac{49x^2}{x^2-25}$

c.  $\frac{x^2-7x+12}{2x+6} \cdot \frac{x^2-4}{x^2-2x-8}$

Divide and reduce, if possible.

a.  $\frac{a^2 - 49}{12a^2} \div \frac{a^2 + 8a + 7}{18a}$

b.  $\frac{2x^2 + 3x - 2}{x^2 + 3x + 2} \div \frac{1 - 2x}{x - 2}$

c.  $\frac{3x^2 - 4x - 4}{x^2 - 4} \div \frac{3x^2 - 7x - 6}{x^2 + 3x + 2} \cdot \frac{3x + 9}{x^2 - 9}$

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