Simplifying Rational Expressions
Multiplying and Dividing Rational Expressions

Example 1:

State the excluded value of x for each rational expression.

a. $\dfrac{x+2}{3x}$

b. $\dfrac{4x}{(x+5)}$

c. $\dfrac{x+3}{x^2+4x-12}$

Example 2:

Simplify.

a. $\dfrac{5(3-x)}{5x}$

b. $\dfrac{2x^2}{x(x+5)}$

c. $\dfrac{5x+3}{x+3}$

Example 3:

Simplify.

a. $\dfrac{15x}{5-10x}$

c. $\dfrac{2r-4}{r-2}$

b. $\dfrac{x^2+6x+9}{x^2-9}$

d. $\dfrac{x+6}{x^2+5x-6}$

e. $\dfrac{16p^2}{28p}$