

Exercises for Simplifying Rational Expressions

1. Simplify each of the following expressions

(a)  $\frac{3x}{6x^2 - 9x}$

(b)  $\frac{x^2 + 2x - 15}{x^2 - 10x + 21}$

(c)  $\frac{2x - 5}{25x - 4x^3}$

(d)  $\frac{2x - 3}{-2x^2 - 3x + 9}$

(e)  $\frac{5x - x^2}{x^3 + 6x^2 - 55x}$

(f)  $\frac{x^2 + xy - 12y^2}{x^2 - 9y^2}$