

Objectives

- Simplify rational expressions
- Simplify rational expressions by multiplying and dividing

**Multiply and Divide Rational Expressions**

1-

Simplify $\frac{x(x-3)(x+6)}{x^2+x-12}$

a) $\frac{x(x+6)}{(x+4)}$ b) $\frac{x(x+2)}{6(x+5)}$ c) $\frac{(x+3)(x-2)}{4}$ d) $-\frac{x+2}{x+4}$

2-

Simplify $\frac{(x^2-9)(x^2-z^2)}{4(x+z)(x-3)}$

a) $\frac{x(x-6)}{(x+4)}$ b) $\frac{x(x+2)}{6(x+5)}$ c) $\frac{(x+3)(x-z)}{4}$ d) $-\frac{x+2}{x+4}$

3-

Simplify $\frac{x^2(x+2)(x-4)}{6x(x^2+x-20)}$

a) $\frac{x(x-6)}{(x+4)}$ b) $\frac{x(x+2)}{6(x+5)}$ c) $\frac{(x+3)(x-2)}{4}$ d) $-\frac{x+2}{x+4}$

4-

Simplify $\frac{x^2-5x-14}{28+3x-x^2}$

a) $\frac{x(x-6)}{(x+4)}$ b) $\frac{(x+2)}{(x+5)}$ c) $\frac{x+2}{x+4}$ d) $-\frac{x+2}{x+4}$