

Elementary Algebra Skill

Simplifying Rational Expressions Containing Opposite Factors

**Simplify.**

$$1) \frac{x-4}{4-x}$$

$$2) \frac{3-y}{y-3}$$

$$3) \frac{x+2}{2+x}$$

$$4) \frac{-x-4}{4+x}$$

$$5) \frac{2y-3}{3-2y}$$

$$6) \frac{6x-7y}{7y-6x}$$

$$7) \frac{2a-4}{2-a}$$

$$8) \frac{t-5}{15-3t}$$

$$9) \frac{ab-4b}{4c-ac}$$

$$10) \frac{b^2-b}{4-4b}$$

$$11) \frac{y^2-y-2}{4-y^2}$$

$$12) \frac{25-z^2}{z^2-10z+25}$$

## Answers to Simplifying Rational Expressions Containing Opposite Factors

1)  $-1$

5)  $-1$

2)  $-1$

6)  $-1$

3)  $1$

7)  $-2$

4)  $-1$

8)  $-\frac{1}{3}$

9)  $-\frac{b}{c}$

10)  $-\frac{b}{4}$

11)  $-\frac{y+1}{y+2}$

12)  $-\frac{5+z}{z-5}$