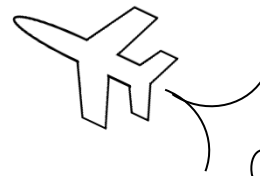


MAth on the Fly!



NAME: _____ DATE: _____

Simplifying Rational Expressions

Simplify each rational expression below.

1.
$$\frac{10w^6x^4y^3z^0}{18wx^4y^7z^8}$$

2.
$$\frac{9x + 36}{3}$$

3.
$$\frac{18x - 12}{24x - 16}$$

4.
$$\frac{16 - 8x}{4x - 8}$$

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

6.
$$\frac{x^2 - 9}{x^2 - 6x - 27}$$

7.
$$\frac{2x^2 + 5x + 2}{14x + 7}$$

8.
$$\frac{x^2 - 3x - 40}{x^2 - 25}$$

9.
$$\frac{x^2 + 7x}{x^2 + 14x + 49}$$

10.
$$\frac{2x^2 + x - 6}{3x^2 + 8x + 4}$$

SOLUTIONS

$$1. \quad \frac{5w^5}{9y^4z^8}$$

$$2. \quad \begin{array}{l} 3(x + 4) \\ \text{or} \\ 3x + 12 \end{array}$$

$$3. \quad \frac{3}{4}$$

$$4. \quad -2$$

$$5. \quad \frac{x + 6}{x - 5}$$

$$6. \quad \frac{x - 3}{x - 9}$$

$$7. \quad \frac{x + 2}{7}$$

$$8. \quad \frac{x - 8}{x - 5}$$

$$9. \quad \frac{x}{x + 7}$$

$$10. \quad \frac{2x - 3}{3x + 2}$$