

# 7-1 Skills Practice

## *Multiplying and Dividing Rational Expressions*

Simplify each expression.

$$\frac{21x^3y}{14x^2y^2}$$

$$\frac{(x^6)^3}{(x^3)^4}$$

$$\frac{x^2 - 4}{(x - 2)(x + 1)}$$

$$\frac{3a^2 - 24a}{3a^2 + 12a}$$

$$\frac{5r^2}{r^2 - 4} \cdot \frac{r + 2}{10r^5}$$

$$\frac{7g}{y^2} \div 21g^3$$

$$\frac{q^2 + 2q}{6q} \div \frac{q^2 - 4}{3q^2}$$

$$\frac{w^2 - 5w - 24}{w + 1} \cdot \frac{w^2 - 6w - 7}{w + 3}$$

$$\frac{16a^2 + 40a + 25}{3a^2 - 10a - 8} \div \frac{4a + 5}{a^2 - 8a + 16}$$

$$\frac{\frac{c^2y}{2d^2}}{\frac{-c^6}{5d}}$$