

Solve each equation below by completing the square.

$$\textcircled{1} \quad y^2 + 2y - 80 = 0 \quad \textcircled{2} \quad x^2 - 10x - 7 = 3 \quad \textcircled{3} \quad k^2 + 16k + 60 = 5$$

$$\textcircled{4} \quad 2x^2 - 24x + 70 = -30 \quad \textcircled{5} \quad 5y^2 + 30y - 75 = 100$$

Solve each equation below using the quadratic formula.

$$\textcircled{6} \quad 3x^2 + 10x + 5 = 0 \quad \textcircled{7} \quad 2d^2 + 4 = 5d \quad \textcircled{8} \quad 4x^2 - 3x = 1 \quad \textcircled{9} \quad 2x = 7 - x^2 \quad \textcircled{10} \quad y^2 + 9 = -9y$$

Simplify. USE ONE STEP PER POWER RULE USED.

$$\textcircled{11} \quad \frac{-27w^3t^7}{-3w^3t^{12}}$$

$$\textcircled{12} \quad \frac{(3c^2)^2(-d^5)}{-45c^7d^3}$$

$$\textcircled{13} \quad \frac{-15r^5s^8(r^3s^2)}{45r^4s}$$

$$\textcircled{14} \quad \frac{(-2r^3)^2(r^{-2})^{-1}}{(r^2)^{-3}}$$

$$\textcircled{15} \quad \frac{16b^6c^5}{(2b^2c)^2}$$

$$\textcircled{16} \quad \frac{-2a^3b^6}{24a^2b^2}$$