Solve the equations by taking square roots, completing the square, factoring, or using the quadratic formula. *(Lessons 11.1, 11.2, 11.3)*

1. $2x^2 - 16 = 0$

$$x = \pm 2\sqrt{2}$$

2. $2x^2 - 6x - 20 = 0$

$$x = -2 \text{ and } x = 5$$

3. $2x^2 + 2x - 2 = 0$

$$x = \frac{-1 \pm \sqrt{5}}{2}$$

4. $x^2 + x = 30$

$$x = -6 \text{ and } x = 5$$

5. $x^2 - 5x = 24$

$$x = -3 \text{ and } x = 8$$

6. $-4x^2 + 8 = 24$

$$x = \pm 2i$$

7. $x^2 + 30 = 24$

$$x = \pm i\sqrt{6}$$

8. $x^2 + 4x + 3 = 0$

$$x = -1 \text{ or } x = -3$$