Solving Quadratic Review - *Solutions*

1. Solve with the Square root method

$$4x^2 = 25$$

$$x = -\frac{5}{2} \; or \; x = \frac{5}{2}$$

2. Solve with the Square root method

$$3(x + 4)^2 = 8$$

$$x = -\frac{2\sqrt{6}}{3} - 4 \; or \; x = \frac{2\sqrt{6}}{3} - 4$$

3. Solve with the Square root method

$$2y^2 - 8 = 6 - 2y^2$$

$$y = \frac{\sqrt{14}}{2} \; or \; y = -\frac{\sqrt{14}}{2}$$

4. Solve by completing the square.

$$x^2 + 6x = 7$$

$$x = -7 \; or \; x = 1$$

5. Solve by completing the square.

$$x^2 - 7x + \frac{5}{4} = 0$$

$$x = \frac{7}{2} - \sqrt{11} \; or \; x = \sqrt{11} + \frac{7}{2}$$

6. Solve by completing the square.

$$2x^2 - 7x + 9 = (x - 3)(x + 1) + 3x$$

$$x = 2 \text{ or } x = 6$$

7. Solve using the Quadratic Formula.

$$x^2 + 8x - 2 = 0$$

$$x = -3\sqrt{2} - 4 \text{ or } x = 3\sqrt{2} - 4$$

8. Solve using the Quadratic Formula.

$$3x + 4 = 4x^2$$

$$x = \frac{3 - \sqrt{73}}{8} \text{ or } x = \frac{\sqrt{73} + 3}{8}$$

9. Solve using the Quadratic Formula.

$$x^2 - 2x + 6 = 2x^2 - 6x - 26$$

$$x = -4 \text{ or } x = 8$$