Additional Problems: Quadratic Equations

**Solving Simple Quadratic Equations**

1. Solve by inspection and explain how you arrived at your answer: x^2 = 10^4
2. What is the first step in solving the following quadratic equation ($\frac{1}{4}$x – 7)^2 = 9?
3. What is the first step in solving the following quadratic equation ($\frac{2}{5}$x + 3)^2 = 16?
4. Solve X^2 = 49 by inspection. There are two real solutions. Enter the lesser number first.
5. Solve X^2 = 64 by inspection. There are two real solutions. Enter the lesser number first.
6. Solve the following quadratic equation using square roots: (x-5)^2 = 49
7. Solve the following quadratic equation using square roots: (x+2)^2 = 25
8. Solve the following quadratic equation using square roots: (x – 12)^2 – 16 = 144
	1. {8, -32}
	2. {24, 0}
	3. {20, 4}
	4. {28, -4}
9. Use inspection to solve the equation ( x^2 = 64), then select the complete solution set below. If there are no real solutions, select “There are no real solutions.”
	1. {-8, 8}
	2. {8}
	3. There are no real solutions.
	4. {-8}
10. Use inspection to solve the equation ( x^2 = 100), then select the complete solution set below. If there are no real solutions, select “There are no real solutions.”
	1. {-10, 10}
	2. {10}
	3. There are no real solutions.
	4. {-10}