

Name: _____

Date: _____

Instructions: Please complete the following problems.**Problem 1.** Solve the equation: $8x - [5x - 4(x - 3)] = 37$ **Problem 2.** Solve the equation: $10x^2 = 160$ **Problem 3.** Solve the equation: $2x^2 + 3x - 20 = 0$ **Problem 4.** Solve the equation: $3x^2 - 10x - 8 = 0$ **Problem 5.** Solve the equation: $x^2 - 11x + 28 = 0$ **Problem 6.** Solve the equation: $4x^2 - 20x = -25$ **Problem 7.** Solve the equation: $x^2 - 6x + 1 = 0$ **Problem 8.** Solve: $\sqrt{3x + 1} = x - 1$ **Problem 9.** Solve: $\frac{x}{x-3} + \frac{3}{x+3} = \frac{6x}{x^2-9}$ **Problem 10.** What are the 4 ways of solving a quadratic?

Problem 11. Multiple Choice: Which method would be ideal to solve: $x^2 = 100$

- (a) factoring
- (b) square root method
- (c) complete the square
- (d) quadratic formula

Problem 12. Multiple Choice: Which method would be ideal to solve: $x^2 + 4x - 1 = 0$

- (a) factoring
- (b) square root method
- (c) complete the square
- (d) quadratic formula

Problem 13. Multiple Choice: Which method would be ideal to solve: $x^2 + 5x + 6 = 0$

- (a) factoring
- (b) square root method
- (c) complete the square
- (d) quadratic formula

Problem 14. Multiple Choice: Which method would be ideal to solve: $2x^2 - 7x + 1 = 0$

- (a) factoring
- (b) square root method
- (c) complete the square
- (d) quadratic formula