

Name: _____

College Algebra: Review (Test 1)

1. Find all solutions of the following equation.

$$|7x - 17| + 15 = 7$$

2. Find all solutions of the following inequality.

$$|-5x + 9| + 10 \leq 29$$

3. Find all solutions of the following equation.

$$\frac{x}{x-1} + 1 = \frac{1}{x-1}$$

4. Find all solutions of the following equation.

$$\frac{5}{7} + \frac{1}{x-2} = 1$$

5. Find all solutions of the following inequality.

$$|-5x + 9| + 11 \geq 30$$

6. Find all solutions of the following equation.

$$2x^2 - 7x + 5 = 0$$

7. Find all solutions of the following equation.

$$x^2 - 4x + 1 = 0$$

8. Find all solutions of the following equation.

$$x^2 + x - 72 = 0$$

9. Find all solutions of the following equation.

$$3x^2 - 17x + 10 = 0$$

10. Find all solutions of the following equation.

$$\frac{x}{x+4} + 3 = \frac{2}{x+4}$$

11. Find all solutions of the following equation.

$$|2x + 5| + 8 = 15$$

12. Find all solutions of the following equation.

$$x^2 + 3x - 4 = 0$$

13. Find all solutions of the following equation.

$$-3 - |4x - 5| = |4x - 5| - 3$$

14. Find all solutions of the following equation.

$$x^2 - 4x - 8 = 0$$