

ALGEBRA

Name _____

Final REVIEW Questions #1

Simplify or solve:

1. $\frac{25}{5x} = \frac{1}{x^2}$

5. $3(2x - 5) + 1 = 11 - (x - 3)$

9. $15x^2 - 20x = 0$

2. $|2x - 4| = 12$

6. $4x - 7 > -3$

10. $\frac{x^{-5}y^{-2}xy}{(x^7)^0y^3}$

3. $|x - 7| \geq 6$

7. $\frac{x^2+5x+6}{x^2-2x-15}$

11. $(2.4 \times 10^5)(3 \times 10^7)$

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

8. $4 + \sqrt{x+5} = 13$

12. $\frac{3y^{-2}}{9y^3}$

13. Graph the solution set to: $y > 2x + 1$ and $x + y \leq -3$

14. Determine the number of solutions to: $-2x^2 + 6x + 8 = 0$