

ALGEBRA TOPICS

NAME _____

Final Study Guide Part 1

Show All Your work!!!

Solve each of the following equations for x.

1. $x + 15 = 29$

2. $-100 + x = -234$

3. $9x = 15$

4. $\frac{x}{15} = -15$

5. $\frac{4}{3}x = 31$

6. $2x + 7 = -31$

7. $3(3x - 6) = 36$

8. $-4(x + 2) = 24$

9. $4(x + 2) + 2 = 30$

10. $5x + 3 = 2x + 7$

11. $\frac{5}{6}x + 7 = 12$

12. $\frac{2}{3}x - 13 + \frac{5}{8}x = 11 + \frac{1}{12}x$

13. $19x - 4(3x - 6) = 8 + 2(x + 1)$

14. $\frac{1}{7}(3x - 1) = 8 - \frac{3}{5}(x + 9)$

15. Simplify each of the following expressions.

a) $(4x^2 + 2x + 1) + (x - 8)$

b) $(3x^2 - 8x + 7) - (x^2 + 3x - 1)$

