

Tone-Up Tuesday #3

One Variable Equations and Inequalities

Name: _____

DUE: **3/10** # Problems per night: ~**2 - 3**

Solving Multi-Step Equation Review:

1. $-2(x - 4) = 2$

2. $\frac{1}{3}x + x = -8$

3. $4 = \frac{2}{3}x + 9 - \frac{1}{3}x$

4. $x - (3x - 9) = -5$

5. $13x - 4(2x - 5) = 15$

6. $2(2x - 3) = 4x - 6$

7. $2(x - 1) = \frac{3}{5}(10 + 5x)$

8. $\frac{1}{2}x - 8 = 14 + \frac{1}{2}x$

9. $\frac{1}{4}(4 - x) = 10 + 2x$

10. $\frac{1}{2}d - \frac{3}{4} = \frac{3}{5}d$

Solving Inequalities Review:

11. $2x - 4 \geq 4x - 1$

12. $y + 2 > -1$

13. $-2x < -14$

14. $-4x \geq -12$

15. $3x + 2 \leq 7x$

16. $2x - 1 > 6x + 2$

17. $13 + 2v - 8 + 6 > -7 - v$

18. $-5n - 6n \leq 8 - 8n - n$

19. $-5n + 6 \geq -7(5n - 6) - 6n$

20. $3(5p - 3) - 10p > 5p - 6$

Linear Equation Practice Problems:

Solve each equation

| | |
|----------------------------------|--|
| 21. $8x - 2 = -9 + 7x$ | 22. $a + 5 = -5a + 5$ |
| 23. $5p - 14 = 8p + 4$ | 24. $p - 4 = -9 + p$ |
| 25. $-8 = -(x + 4)$ | 26. $12 = -4(-6x - 3)$ |
| 27. $2(4x - 3) - 8 = 4 + 2x$ | 28. $3n - 5 = -8(6 + 5n)$ |
| 29. $-(1 + 7x) - 6(-7 - x) = 36$ | 30. $-3(4x + 3) + 4(6x + 1) = 43$ |
| 31. $24a - 22 = -4(1 - 6a)$ | 32. $-5(1 - 5x) + 5(-8x - 2) = -4x - 8x$ |

Linear Inequality Practice Problems:

Draw a graph for each inequality

33. $b \leq -2$

34. $2 \geq -p$

35. $-n > -5$

36. $n \leq -5$

37. $6 \geq p$

38. $-n \geq -2$

39. $3 > -x$

40. $x \leq 1$

