

Name _____ Date: _____ Period: _____

Unit 1A Review

Simplify the following expressions

1. $4 - 2 * 5 + 12$

2. $(30 - 2) \div 3$

3. $15 + 40 \div 20$

4. $20 + 16 - 15$

5. $9 \times (3 + 3) \div 6$

6. $8^2 - 1 - (18 - 2) \div 8$

7. $(10 * 2)^2 \div (1 + 4)$

8. $3.4 - (-12.1)$

9. $8.7 + 3.8 + 12.3$

10. $3.4 - 5 - 10.4$

11. $2.2 - 7.3$

12. $(-8.1) - (-8.9)$

13. $(-5.6) - (-12.6) + (-6.6)$

14. $-\frac{5}{4} * \frac{1}{3}$

15. $-2 * \frac{3}{7}$

$$16. \frac{1}{2} \div \frac{8}{7}$$

$$17. -\frac{3}{2} \div -\frac{10}{7}$$

$$18. -\frac{1}{3} + \frac{3}{8}$$

$$19. \frac{1}{3} - \frac{5}{3}$$

$$20. \frac{3}{2} + \frac{1}{2}$$

$$21. \frac{2}{5} + \frac{4}{5}$$

$$22. \frac{1}{3} - \frac{1}{3}$$

$$23. -6(5 - 4) + 10^2$$

$$24. x + 2x$$

$$25. 4(2b) + 3b$$

$$26. -3a + 4a$$

$$27. 1 - 3v + 10$$

$$28. 1 + 7(1 - 3b)$$

29. $3m - 8(7 - 4m)$

30. $10x + 36 - 38x - 47$

31. $-44v - 59v$

32. $6(-5n + 7)$

33. $(-5n + 7) * 6$

34. $4(3r - 8) + 2(2r - 6)$

35. $3(2a + 2b + 2c) - (6a + 6b + 5c)$

36. Choose the best symbol for the following terms or phrases

Possible Symbols. (Can be used multiple times)				
÷	=	-	+	×
<	>	≤	≥	

Difference _____

Increase _____

Minus _____

At least _____

More than _____

No more than _____

Is _____

Product _____

At most _____

Quotient _____

Less than _____

Decrease _____

Greater than or equal to _____

Greater than _____

Less than or equal to _____

No less than _____

Write the following as an algebraic expression.

37. **The difference of 10 and 5**

38. **a number decreased by 15**

39. **The sum of a number and 8**

40. **The product of 15 and a number**

41. **The quotient of 12 and 52**

42. **The quotient of 52 and 12**

43. **The difference of a number and 12**

44. **Half of a number, increased by 15**

45. **The sum of a number squared is less than or equal to 42**

46. **A number increased by 12 is at least 70**

47. **The product of 12 and a number is more than 88**

48. **The difference of 12 and a number is greater than or equal to 123**

49. **x minus 12 is no more than 17**

50. A mistake was made in the following problems. Identify the step where the mistake was made for each problem.

Simplify the expression

$$-4(6 + x) - 4(2x + 1)$$

Step 1: $-4(6 + x) - 4(2x + 1)$

Step 2: $-24 + x - 8x - 4$

Step 3: $-25 - 4 + x - 8x$

Step 4: $-29 - 7x$

Simplify the expression

$$-(2x + 4y - 2) + 3x$$

Step 1: $-(2x + 4y - 2) + 3x$

Step 2: $-2x - 4y + 4 + 3x$

Step 3: $-2x + 3x - 4y + 4$

Step 4: $-3x + 4$