Kerry Ojakian's MTH 28.5 Class
Class Assignment #6

Express the following WITHOUT calculating.

1. 2 more than 8

2. 7 less then 100

3. The sum of 71 and 87

4. 20 more than x

5. The product of 34 and 16

6. The product of 32 and an unknown

7. The product of two unknowns.

8. The quotient of 292 and 13

9. The difference of 34 and 892

10. The difference between 45 and x

11. The sum of an unknown and 100

12. The sum of a and b

13. The sum of two unknowns

14. 15 less than 200

15. 1 less than y

16. 13 less than an unknown quantity

17. 16 less than an unknown quantity

18. Double 17.

19. Double an unknown

20. 8 times an unknown

21. A third of 200

22. A third of x

23. The difference between 89 and 5

24. The difference between x and y

25. The quotient of A and 2

26. The quotient of an unknown and 7

Distribute:

27. $3(4x + 2) =$

28. $3(4x - 2) =$

29. $-3(4x + 2) =$

30. $-7(-3y - 1) =$

31. $(-2w - 2)10 =$

32. $\dfrac{1}{2}(2x + 4) =$

33. $(8x + 2)\dfrac{3}{2} =$

Combine Like Terms:

34. $3x + 5 + 2x + 4 =$

35. $c + 9 + 2c + 7 =$

36. $35x + 5 - 35x - 11 =$

37. $-3c - 5 - 20c =$

38. $\dfrac{1}{2} + \dfrac{1}{3}x + \dfrac{3}{2} + \dfrac{2}{3}x =$

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Distribute then combine like terms:

39. $4 + 2(3x + 2) =$

40. $4 - 2(3x + 2) =$

41. $4 - 2(-3x + 2) =$

42. $2(-3u - 1) + 3 =$

43. $2(-3u - 1) + 3u =$

44. $2(2 + 3x) + 5(2x + 3) =$

For the following, simplify first. Then evaluate BOTH the ORIGINAL expression and the SIMPLIFIED expression for the given number (they should evaluate to the same number!).

45. $3x + 2x + 1$ for $x = 5$.

Example. Simplify: $3x + 2x + 1 = 5x + 1$.

Evaluate Original: $3(5) + 2(5) + 1 = 26$.

Evaluate Simplified: $5(5) + 1 = 26$

46. $2x + 7x$ for $x = 3$.

47. $3x + 2 + 4x - 1$ for $x = 2$.

48. $5x + 2 - 4x - 2$ for $x = -1$.

49. $3(2y + 2)$ for $y = 2$.

50. $(y - 3)10$ for $y = 2$.

51. $(y - 3)9 + y$ for $y = -2$.