

Combining Like Terms

Unit 1: Expressions

Simplify using the distributive property and combining like terms when possible:

1. $6a - 10a$ $-4a$	2. $-8m - m$ $-9m$
3. $x + 6 + 7$ $x + 13$	4. $-9v + 10v$ $1v$ or v
5. $-1 - 6x - 2$ $-3 - 6x$ $-6x - 3$	6. $-10(x - 7)$ $-10x + 70$
7. $6(9 - 7n)$ $54 - 42n$ $-42n + 54$	8. $-(x + 5)$ $-1(x + 5)$ $-1x - 5$
9. $8(-3 + 7m)$ $-24 + 56m$ $56m - 24$	10. $-(4k - 1)$ $-1(4k - 1)$ $-4k + 1$

$$11. -5m + 9(4m - 2)$$

$$-5m + 36m - 18$$

$$\boxed{31m - 18}$$

$$12. 9 + 3(-6 - 6x)$$

$$9 - 18 - 18x$$

$$-9 - 18x$$

$$\boxed{-18x - 9}$$

$$13. -7 - 7(3 + 6x)$$

$$-7 - 21 - 42x$$

$$-28 - 42x$$

$$\boxed{-42x - 28}$$

$$14. 10 - 3(k + 3)$$

$$10 - 3k - 9$$

$$1 - 3k$$

$$\boxed{-3k + 1}$$

$$15. 8(-4 - 2x) - 4x$$

$$-32 - 16x - 4x$$

$$-32 - 20x$$

$$\boxed{-20x - 32}$$

$$16. 5(-8x + 9) - 10(x + 8)$$

$$-40x + 45 - 10x - 80$$

$$\boxed{-50x - 35}$$

$$17. -9(3 - 8r) + 9(r - 2)$$

$$-27 + 72r + 9r - 18$$

$$-45 + 81r$$

$$\boxed{81r - 45}$$

$$18. 6(7n - 2) + 9(n + 2)$$

$$42n - 12 + 9n + 18$$

$$\boxed{51n + 6}$$

$$19. 8(7m + 4) + 5(2 + 3m)$$

$$56m + 32 + 10 + 15m$$

$$\boxed{71m + 42}$$

$$20. -10(9x - 6) + 6(x - 9)$$

$$-90x + 60 + 6x - 54$$

$$\boxed{-84x + 6}$$