

Simplifying Algebraic Expressions

Evaluate each expression using the given values of the variables.

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

2. $x^2 - 4x + 3$ for $x = -2$

3. $(-x)^2 + x$ for $x = 3$

4. $(-x)^2 + x$ for $x = -5$

5. $4 - x^2$ for $x = -5$

6. $m^2 - \frac{3n}{m}$ for $m = 4$ & $n = 2$

Simplify each expression by using the Distributive Property to remove parentheses and combining like terms.

7. $5x - 2x$

8. $14k - 11k$

9. $4z - 6z + 8z$

10. $2m + 3n + 8m + 7n$

11. $0.3x^7 + x^7 + x^7$

12. $1.7n^4 - n^2 + 2.1n^4$

13. $-3y^6 + 13y^6$

14. $-(6w + 12y - 13z)$

15. $5(k + 3) - 8k$

16. $3(7 - z) - z$

17. $7n - (3n + 8)$

18. $(7 - 2x) - (x + 4)$

19. $(3k + 1) - (3k - 6)$

20. $-6(x - 3) + 2(n + 1)$

21. $\frac{2}{3}x + \frac{1}{6}x$

22. $\frac{3}{5}y + \frac{7}{10}y$

23. $\frac{2}{5}x - x$

24. $2x - \frac{2}{7}x$

25. $\frac{1}{2}(8x + 5)$

26. $\frac{1}{5}(60 - 15x) + \frac{3}{4}x$

27. $3(0.2x + 6) - 5(1.6x)$