

7-5 Skills Practice**Adding and Subtracting Polynomials**

Find each sum or difference.

1. $(2x + 3y) + (4x + 9y)$

2. $(6s + 5t) + (4t + 8s)$

3. $(5a + 9b) - (2a + 4b)$

4. $(11m - 7n) - (2m + 6n)$

5. $(m^2 - m) + (2m + m^2)$

6. $(x^2 - 3x) - (2x^2 + 5x)$

7. $(d^2 - d + 5) - (2d + 5)$

8. $(2h^2 - 5h) + (7h - 3h^2)$

9. $(5f + g - 2) + (-2f + 3)$

10. $(6k^2 + 2k + 9) + (4k^2 - 5k)$

11. $(x^3 - x + 1) - (3x - 1)$

12. $(b^2 + ab - 2) - (2b^2 + 2ab)$

13. $(7z^2 + 4 - z) - (-5 + 3z^2)$

14. $(5 + 4n + 2t) + (-6t - 8)$

15. $(4t^2 + 2) + (-4 + 2t)$

16. $(3g^3 + 7g) - (4g + 8g^3)$

17. $(2a^2 + 8a + 4) - (a^2 - 3)$

18. $(3x^2 - 7x + 5) - (-x^2 + 4x)$

19. $(7y^2 + y + 1) - (-4y + 3y^2 - 3)$

20. $(2c^2 + 7c + 4) + (c^2 + 1 - 9c)$

21. $(n^2 + 3n + 2) - (2n^2 - 6n - 2)$

22. $(a^2 + ab - 3b^2) + (b^2 + 4a^2 - ab)$

23. $(\ell^2 - 5\ell - 6) + (2\ell^2 + 5 + \ell)$

24. $(2m^2 + 5m + 1) - (4m^2 - 3m - 3)$

25. $(x^2 - 6x + 2) - (-5x^2 + 7x - 4)$

26. $(5b^2 - 9b - 5) + (b^2 - 6 + 2b)$

27. $(2x^2 - 6x - 2) + (x^2 + 4x) + (3x^2 + x + 5)$

7-5 Practice**Adding and Subtracting Polynomials**

Find each sum or difference.

1. $(4y + 5) + (-7y - 1)$

2. $(-x^2 + 3x) - (5x + 2x^2)$

3. $(4k^2 + 8k + 2) - (2k + 3)$

4. $(2m^2 + 6m) + (m^2 - 5m + 7)$

5. $(5a^2 + 6a + 2) - (7a^2 - 7a + 5)$

6. $(-4p^2 - p + 9) + (p^2 + 3p - 1)$

7. $(x^3 - 3x + 1) - (x^3 + 7 - 12x)$

8. $(6x^2 - x + 1) - (-4 + 2x^2 + 8x)$

9. $(4y^2 + 2y - 8) - (7y^2 + 4 - y)$

10. $(w^2 - 4w - 1) + (-5 + 5w^2 - 3w)$

11. $(4u^2 - 2u - 3) + (3u^2 - u + 4)$

12. $(5b^2 - 8 + 2b) - (b + 9b^2 + 5)$

13. $(4d^2 + 2d + 2) + (5d^2 - 2 - d)$

14. $(8x^2 + x - 6) - (-x^2 + 2x - 3)$

15. $(3h^2 + 7h - 1) - (4h + 8h^2 + 1)$

16. $(4m^2 - 3m + 10) + (m^2 + m - 2)$

17. $(x^2 + y^2 - 6) - (5x^2 - y^2 - 5)$

18. $(7t^2 + 2 - t) + (t^2 - 7 - 2t)$

19. $(k^3 - 2k^2 + 4k + 6) - (-4k + k^2 - 3)$

20. $(9j^2 + j + jk) + (-3j^2 - jk - 4j)$

21. $(2x + 6y - 3z) + (4x + 6z - 8y) + (x - 3y + z)$

22. $(6f^2 - 7f - 3) - (5f^2 - 1 + 2f) - (2f^2 - 3 + f)$

23. BUSINESS The polynomial $s^3 - 70s^2 + 1500s - 10,800$ models the profit a company makes on selling an item at a price s . A second item sold at the same price brings in a profit of $s^3 - 30s^2 + 450s - 5000$. Write a polynomial that expresses the total profit from the sale of both items.

24. GEOMETRY The measures of two sides of a triangle are given. If P is the perimeter, and $P = 10x + 5y$, find the measure of the third side.

