

Exercises 15-3

Subtract.

- $(2x^2 + 4x + 5) - (x^2 + 3x + 1)$
- $(5c^2 + 6c + 8) - (2c^2 + 4c + 5)$
- $(8x^2 + 9x + 9) - (5x^2 + 2x + 3)$
- $(5a^2 + 8a + 9) - (3a^2 + 2a + 1)$
- $(8d^2 + 3d + 6) - (3d^2 + 4d + 8)$
- $(9n^2 + 4n + 3) - (4n^2 + 7n + 9)$
- $(4m^2 - 3m + 2) - (6m^2 + 7m + 6)$
- $(6y^2 - 3y - 2) - (9y^2 + 5y + 7)$
- $(8a^3 - 6a^2 + 2a + 4) - (5a^3 + 7a^2 - 5a - 7)$
- $(3b^3 - 4b^2 + b - 4) - (7b^3 + 6b^2 - 4b + 8)$
- $(-6x^2 + 5x - 9) - (-3x^2 - x + 7)$
- $(a^2 + 2a - 3) - (-5a^2 + 2a + 4)$
- $(8a^3 - 6a^2 - 2a + 9) - (4a^3 - 2a^2 + 6a - 8)$
- $(3x^4 - 8x^3 - 6x^2 + 5x + 2) - (6x^4 + 2x^3 - 8x^2 + 6x + 4)$
- $(4a^3 - 6a) - (5a^4 - 8a^2 + 2)$
- $(9y^4 - 6y^2 + 3y - 6) - (4y^3 - 6y - 4)$
- $(7a^3 + 9a^2 - 2) - (5a^4 - 8a^2 - 2)$
- $(-6t^4 - 5t^3 - 8t^2 + 4) - (-2t^3 + 8t^2 + t + 1)$
- $(z^4 - z^3 - 2z^2 - 3z) - (5z^4 + 7z^2 - z - 8)$
- $(-2d^4 + 4d^3 + 3) - (5d^3 - 2d^2 + 3d - 7)$
- Find the difference when $4x^3 + 7x^2 - 3x - 6$ is subtracted from $8x^3 - 7x^2 + 3x - 9$.
- Find the difference when $-4x^3 - x^2 + 7x + 3$ is subtracted from $-6x^3 + 9x^2 - 5x - 6$.

Solve.

- $(6a + 9) - (2a + 21) = 0$
- $(7n + 2) + (3n - 12) = 0$
- $(3d - 3) - (8d + 5) = -3$
- $(7y + 1) - (-y + 7) = 3y - 26$
- $(x^2 - 8x + 3) - (x^2 - 5x - 12) = 0$
- $(c^2 - 5c + 12) + (-c^2 + 3c - 12) = 0$

29. $(4r + 9r^2) - (9r^2 + 2) = r + 1$

30. $(n^2 + 2n - 9) - (n^2 - 3n + 16) = n - 5$

Simplify.

31. $(7a^2 + 4a + 5) + (2a^2 - 5a + 8) - (3a^2 - 6a + 4)$

32. $(x^2 - 6x + 1) + (3x^2 + 7x + 3) - (2x^2 + 3x + 5)$

33. $(6n^2 - 7n + 9) - (3n^2 + 2n + 1) - (n^2 - 4n + 3)$

34. $(c^2 - 3c + 7) - (5c^2 + 3c - 5) - (4c^2 + 7c - 2)$

35. $(2b^2 + 5b - 8) - (3b^2 + 9b + 5) + (3b^2 - 2b + 7)$

36. $(m^2 + 6m - 2) - (4m^2 - 7m - 3) + (2m^2 + 5m - 3)$