

Adding and Subtracting Polynomials

Perform the operations.

$$1. \quad (12y^2 + 17y - 4) + (9y^2 - 13y + 3) =$$

$$2. \quad (2x^3 + 7x^2 + x) + (2x^2 - 4x - 12) =$$

$$3. \quad (-3m^2 + m) + (4m^2 + 6m) =$$

$$4. \quad (7z^3 + 4z - 1) + (2z^2 - 6z + 2) =$$

$$5. \quad (3a^2 + 2a - 2) - (a^2 - 3a + 7) =$$

$$6. \quad (5x^2 - 2x - 1) - (3x^2 - 5x + 7) =$$

$$7. \quad -(3z^2 + 4z) - (6z^2 - 2) =$$

$$8. \quad (6x^3 - 4x^2 + x - 9) - (3x^2 + 7x + 3) =$$

$$9. \quad (2x^2 + 1) + (x^2 - 2x + 1) =$$

$$10. \quad (-s^2 - 3) - (2s^2 + 10s) =$$

$$11. \quad (5 - 9a^3) + (4a^2 + 6a - 3) =$$

$$12. \quad (3x^2 - x) + 5x^3 + (-4x^3 + x^2 - 8) =$$

$$13. \quad -10(u + v) + 8(u - 1) - 3(u + 6) =$$

$$14. \quad 7x - [2(x^2 - z) + 4x^2 - 7z] + 6z^2 =$$

$$15. \quad \text{Subtract } t^4 - 3t^2 + 7 \text{ from } 5t^3 - 9.$$

$$16. \quad \text{Subtract } y^5 - y^4 \text{ from } y^2 + 3y^4.$$

$$17. \quad \text{Add } 4(m^2 + 2) \text{ to } 3m^2 + 7m.$$

$$18. \quad 3(x^2 - 2x + 3) - 4(4x + 1) - (3x^2 - 2x) =$$

$$19. \quad (.5x^2 + 4.25x - .9) - .5(x^2 + 7x - 3) =$$

$$20. \quad .23(4x^2 + 9x - 4) + .9(.04x^2 + 3x - 7) =$$

Solutions

1. $21y^2 + 4y - 1$
2. $2x^3 + 9x^2 - 3x - 12$
3. $m^2 + 7m$
4. $9z^2 - 2z + 1$
5. $2a^2 + 5a - 9$
6. $2x^2 + 3x - 8$
7. $-9z^2 - 4z + 2$
8. $6x^3 - 7x^2 - 6x - 12$
9. $3x^2 - 2x + 2$
10. $-3s^2 - 10s - 3$
11. $-9a^3 + 4a^2 + 6a + 2$
12. $x^3 + 4x^2 - x - 8$
13. $-5u - 10v - 14$
14. $-6x^2 + 7x + 6z^2 + 9z$
15. $-t^4 + 5t^3 + 3t^2 - 16$
16. $y^2 + 2y^4 - y^5$
17. $7m^2 + 7m + 8$
18. $-20x + 9$
19. $.75x + 2.4$
20. $.956x^2 + 4.77x - 7.22$