

Adding and Subtracting Polynomials

Simplify each expression.

1) $(5 + n) - (4 - n)$

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

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

4) $(4a^2 - 4a^4) - (4a + a^4)$

5) $(14x^4 + 8x^3 + 13) + (3x^5 + 5x^3 + 6x^4)$

6) $(-m - 11m^5 + 9m^2) - (-2m - 13m^5 + 10m^2)$

7) $(-7x^3 - 9x^5 + 8) - (12 - 5x^2 - 3x^3)$

8) $(2 + 12n^3 - 8n^2) - (9n^5 - 13 + 8n^3)$

9) $(x^2 - 10x^2y^4) + (14x^2y^4 + 3x^2 + 8y) + (-2y^2 - 4x^2)$

10) $(-8a^4b^2 + 6a^4b^4) - (-8a^4b^2 + 11a^4b^4 + 5a^4) + (-6a^4 - 6a^4b^2)$

11) $(-7m^4n^4 - 12m^4n^2) + (-6m^4n^2 + 9m^3n^3 + 2m^4n^4) + (-5m^4n^4 - 11m^4n^2)$

$$12) (-11x^3 - 3y^2) - (-11x^3 - 10y^2 - 14x^2y) - (-6x^2y - 10x^3)$$

$$13) (13x^2 - 14x^4y^4) + (-14x^2 + 7x^4y^4) - (-5x^4y^4 + 10x^2)$$

$$14) (-12u^2v^2 + 14u^3) - (11u^3 + 10u^2v^2) - (-8u^3 - 14u^2v^2)$$

$$15) (-14ab^2 - 13a^2b^3 + 5b^2) - (9a^2 + 11b^2 + 10ab^2) + (10a^2b^3 + 6a^2 + b^2)$$

$$16) (11n^4 - 7mn^3 + 4m^3n^4) - (11n^4 + 7m^3n^4 + 5mn^3) - (-12m^3n^4 - 5mn^3 + 14n^4)$$

$$17) (n - 9m^4n^3 - 6m^4n^4 + 5n^2) + (-7n - 14m^4n^4 + 10n^2 - 11m^4n^3) + (-3m^4n^3 - 8m^4n^4 + 14n^2 - 10n)$$

$$18) (4m^3n + 6n + 9 - 9mn) + (2n - 14m^2 + 6n^3 - 9) + (8mn^3 - 9 + 2n^3 - 6m^3n)$$