

Find each sum or difference.

1) $(6n^2 - 4) + (-2n^2 + 9)$

5) $(x + 5) + (2y + 4x - 2)$

2) $(11 + 4d^2) - (3 - 6d^2)$

6) $(3x^2 + 8x + 4) - (5x^2 - 4)$

3) $(4x + 5xy + 3y) - (3y + 6x + 8xy)$

7) $(9z - 3z^2) + (4z - 7z^2)$

4) $(-3n^2 - 8 + 2n) + (5n + 13 + n^2)$

8) $(-4y^3 - y + 10) - (4y^3 + 3y^2 - 7)$

9) $(3a + 2b - 7c) + (6b - 4a + 9c) + (-7c - 3a - 2b)$

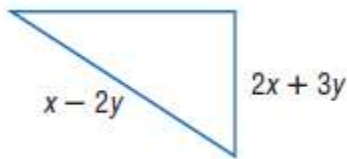
10) $(5x^2 - 3) + (x^2 - x + 11) + (2x^2 - 5x + 7)$

11) $(3y^2 - 8) + (5y + 9) - (y^2 + 6y - 4)$

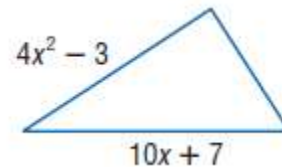
12) $(9x^3 + 3x - 13) - (6x^2 - 5x) + (2x^3 - x^2 - 8x + 4)$

The measures of two sides of a triangle are given. If P is the perimeter, find the measure of the third side.

13) $P = 7x + 3y$



14) $P = 10x^2 - 5x + 16$

**Find the error.**15) Esteban and Kendra are finding $(5a - 6b) - (2a + 5b)$. Who is correct? Explain your reasoning.

Esteban

$$\begin{aligned} (5a - 6b) - (2a + 5b) \\ = (-5a + 6b) + (-2a - 5b) \\ = -7a + b \end{aligned}$$

Kendra

$$\begin{aligned} (5a - 6b) - (2a + 5b) \\ = (5a - 6b) + (-2a - 5b) \\ = 3a - 11b \end{aligned}$$

Find the degree of each polynomial.

16) $15t^3y^2$

18) $m^2 + n^3$

17) 24

19) $4x^2y^3z - 5x^3z$

Simplify. Assume no denominator is equal to zero.

20) $\frac{49^4b^7c^2}{7ab^4c^3}$

22) $\frac{(8n^7)^2}{(3n^2)^{-3}}$

21) $\frac{-4n^3p^{-5}}{n^{-2}}$

Express each number in standard form.

23) 8×10^6

25) 5×10^{-4}

24) 2.9×10^5

26) 4.8×10^{-7}