

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

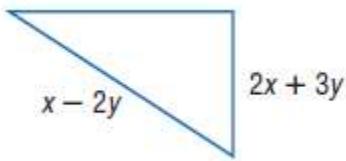
10)  $(5x^2 - 3) + (x^2 - x + 11) + (2x^2 - 5x + 7)$

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

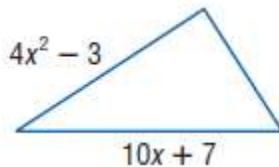
12)  $(9x^3 + 3x - 13) - (6x^2 - 5x) + (2x^3 - x^2 - 8x + 4)$

**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.**

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

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

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