

Pre-Algebra

Unit 16 Review - Polynomial Operations

Practice Problem Set

Perform the indicated operation. *Represent all final answers as a simplified polynomial expression written in standard form.*

1. $5x - 6 + 10x + 5x^2 - 3$

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

3. $(2a)(3a^2)(4a)$

4. $-3x^2(3x^2 - 9x + 5)$

5. $(5x^2 + 12x) - (7x - 4)$

6. $\frac{20ab^4c^3}{5ac}$

7. $(2x + 1)(x - 4)$

8. $(x + 7)(x - 7)$

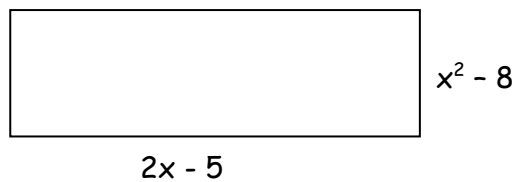
9. $(6x - 1)^2$

10. $\frac{20ab^5c^3 - 10a^2b + 5ab}{5ab}$

11. $(6x^3 + 7x) - (3x^2 + 5) + (x^2 - 10x - 1)$

12. Subtract $3x^2 - 2x + 1$ from $10x - 3$

14. Find the **perimeter** and **area** of the following rectangle.



15. Perform the indicated operations. *Remember PEMDAS.*

a) $\frac{8x^9y^3}{x^2(4x^5y)}$

b) $(x - 9)(x + 9) - (4x + 5)(4x - 5)$

c) $-3x(7x - 6) - 5(11x^2 + 9x - 3)$

16.) Find the perimeter of the triangle.

