

Operations on Polynomials

Intermediate Algebra

NAME _____

Simplify. Follow any other specific instructions.

1. $(3ab - 2bc + cd) + (ab - 2cd + bc)$

2. $5(x - y) - 2(z + t) + 3(z + t) - 2(x - y)$

Answer _____

Answer _____

3. Subtract $(3y - 2x + 1)$ from $(3x + 2y - z)$

4. $9 - [-2x - 7(2x - 1)]$

Answer _____

Answer _____

5. $3x^4(-x^3y) - 4xy(-x)^6$

6. $(a^2b)^2(a^2 - 2ab + b^2)$

Answer _____

Answer _____

7. $4(2x + 1)(x + 3)$

Answer _____

8. $2(3x + 5y)(3x - 5y)$

Answer _____

9. $(2a + b)^3$

Answer _____

10. $(x - 3)(x - 5) - 2(x - 2)^2$

Answer _____

Problems 11 - 12: Divide using long division.

11. $\frac{16x^2 - 32x + 9}{4x - 5} \left(x \neq \frac{5}{4}\right)$

Answer _____

12. $\frac{-16y^3 + 24y^2 + y}{y - 1} (y \neq 1)$

Answer _____