

Name: _____

Period: _____

Polynomial Operations**Simplify the following expressions.**

1. $5x - (2x + 5)$ $3x - 5$

2. $(5a - 3b) + (-2a + 4b)$ $3a + b$

3. $(4y - 7) - (9 + 14y)$ $-10y - 16$

4. $(3x^3)(-6x^5)$ $-18x^8$

5. $2(x + 9)$ $2x + 18$

6. $-6(x - 2y + 3z)$ $-6x + 12y - 18z$

7. $(5a + 3b) + 2(a - 3b)$ $7a - 3b$

8. $(c + 9)(c + 3)$ $c^2 + 12c + 27$

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

10. $\frac{w^2 + 8w}{w}$ $w + 8$

11. $\frac{15k^3 - 9k^2 + 3k}{3k}$ $5k^2 - 3k + 1$

12. Subtract $(6x^2 - 3x + 50)$ from $(8x^2 - 5x + 9)$
 $(8x^2 - 5x + 9) - (6x^2 - 3x + 50)$
 $2x^2 - 2x - 41$