

Adding and Subtracting Polynomials - Practice Worksheet

Name: _____ Date: _____

Instructions: Simplify each expression by adding or subtracting the polynomials. Write your answer in standard form (highest degree first). Show your work.

1. $(3x + 5) + (2x + 4)$

.....

2. $(4x^2 + 3x) + (x^2 + 2x)$

.....

3. $(7x - 6) - (3x - 2)$

.....

4. $(5x^2 + 2x + 1) + (3x^2 - x + 4)$

.....

5. $(6x^2 - 4x + 3) - (2x^2 + x - 1)$

.....

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

.....

7. $(9x^2 - 5x + 7) - (4x^2 - 5x + 7)$

.....

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

.....

9. $(5x^3 + 3x^2 - x + 6) - (2x^3 - x^2 + 4x - 3)$

.....

10. $(4x^4 - 3x^3 + 2x^2 - x + 1) - (x^4 + 2x^3 - x^2 + 3x - 5)$

.....

Answer Key

1. $5x + 9$

2. $5x^2 + 5x$

3. $4x - 4$

4. $8x^2 + x + 5$

5. $4x^2 - 5x + 4$

6. $3x^3 - 3x^2 + 2$

7. $5x^2$

8. $4x^3 + 3x^2 - 2x - 2$

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

10. $3x^4 - 5x^3 + 3x^2 - 4x + 6$