

Multiplying Polynomials - Practice Worksheet

Name: _____ Date: _____

Instructions: Multiply each pair of polynomials. Show your work, then simplify by combining like terms. Check your answers with the key on the back.

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

.....

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

.....

3. $(2x + 1)(x + 6)$

.....

4. $(3x - 2)(x - 5)$

.....

5. $(x + 7)^2$

.....

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

.....

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

.....

8. $(2x - 1)(3x^2 + x - 4)$

.....

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

.....

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

.....

Answer Key

1. $x^2 + 8x + 15$

2. $x^2 - 2x - 8$

3. $2x^2 + 13x + 6$

4. $3x^2 - 17x + 10$

5. $x^2 + 14x + 49$

6. $4x^2 - 12x + 9$

7. $x^3 + 2x^2 - 5x + 12$

8. $6x^3 - x^2 - 9x + 4$

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

10. $6x^4 - x^3 + 5x^2 - 14x - 12$