

Multiply Polynomials - Practice Worksheet

Name: _____ Date: _____

Instructions: Multiply each pair of polynomials. Show your work, simplify fully by combining like terms, and write your final answer in standard form (highest degree first).

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

.....

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

.....

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

.....

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

.....

5. $(x + 6)^2$

.....

6. $(2x - 5)^2$

.....

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

.....

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

.....

9. $(2x - 1)(3x^2 + x - 5)$

.....

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

.....

Answer Key

1. $x^2 + 5x + 6$

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

3. $2x^2 + 13x + 15$

4. $3x^2 - 14x + 8$

5. $x^2 + 12x + 36$

6. $4x^2 - 20x + 25$

7. $3x^3 - 12x^2 + 21x$

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

9. $6x^3 - x^2 - 11x + 5$

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