

Name: _____

Date: _____

Multiplying Binomials and Trinomials **Answers**

Section I. Multiply the binomials

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

$$x^3 + 5x^2 + 10x + 12$$

2. $(x - 8)(x^2 - x - 5)$

$$x^3 - 9x^2 - 13x + 40$$

3. $(x - 9)(x^2 + 2x - 7)$

$$x^3 - 7x^2 - 25x + 63$$

4. $(x + 7)(x^2 - 4x - 11)$

$$x^3 + 3x^2 - 39x - 77$$

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

$$2x^3 + 7x^2 - 27x + 18$$

6. $(x - 2)(6x^2 - x + 12)$

$$6x^3 - 13x^2 + 14x - 24$$

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

$$3x^3 + 20x^2 + 15x - 50$$

8. $(x + 7)(4x^2 - 3x - 1)$

$$4x^3 + 25x^2 - 22x - 7$$

9. $(2x - 1)(x^2 - 8x - 6)$

$$2x^3 - 17x^2 - 4x + 6$$

10. $(3x + 4)(x^2 + x + 6)$

$$3x^3 + 7x^2 + 22x + 24$$

11. $(2x + 3)(2x^2 + 4x - 3)$

$$4x^3 + 14x^2 + 6x - 9$$

12. $(4x - 2)(3x^2 - 7x + 8)$

$$12x^3 - 34x^2 + 46x - 16$$