

Multiplying Binomials - FOIL 1 - KEY

$$1. \quad (x + 1)(x + 2) = x^2 + 3x + 2 \quad 17. \quad (x + 5)(x + 6) = x^2 + 11x + 30$$

$$2. \quad (x + 1)(x - 3) = x^2 - 2x - 3 \quad 18. \quad (x + 3)^2 = x^2 + 6x + 9$$

$$3. \quad (x + 8)(x - 1) = x^2 + 7x - 8 \quad 19. \quad (x - 1)(x + 8) = x^2 + 7x - 8$$

$$4. \quad (x - 2)(x + 2) = x^2 - 4 \quad 20. \quad (x - 5)^2 = x^2 - 10x + 25$$

$$5. \quad (x + 2)(x + 7) = x^2 + 9x + 14 \quad 21. \quad (x - 4)(x + 6) = x^2 + 2x - 24$$

$$6. \quad (x - 2)(x - 3) = x^2 - 5x + 6 \quad 22. \quad (x - 2)(x - 7) = x^2 - 9x + 14$$

$$7. \quad (x - 5)(x + 3) = x^2 - 2x - 15 \quad 23. \quad (x + 4)(x + 9) = x^2 + 13x + 36$$

$$8. \quad (x + 5)(x - 5) = x^2 - 25 \quad 24. \quad (x + 5)(x - 3) = x^2 + 2x - 15$$

$$9. \quad (x - 4)(x - 4) = x^2 - 8x + 16 \quad 25. \quad (x - 3)(x + 3) = x^2 - 9$$

$$10. \quad x(x - 6) = x^2 - 6x \quad 26. \quad (x + 10)(x + 2) = x^2 + 12x + 20$$

$$11. \quad x + 2(x + 1) = 3x + 2 \quad 27. \quad (x - 7)(x - 8) = x^2 - 15x + 56$$

$$12. \quad (2x + 3)(3x + 1) = 6x^2 + 11x + 3 \quad 28. \quad (x - 7)(x + 6) = x^2 - x - 42$$

$$13. \quad (4x - 5)(4x + 5) = 16x^2 - 25 \quad 29. \quad (3x - 2)(3x - 1) = 9x^2 - 9x + 2$$

$$14. \quad (5x + 1)(5x - 1) = 25x^2 - 1 \quad 30. \quad (7x + 8)(7x - 8) = 49x^2 - 64$$

$$15. \quad (x + 1)^2 = x^2 + 2x + 1 \quad 31. \quad (4x - 5)(x + 5) = 4x^2 + 15x - 25$$

$$16. \quad (x + 6)^2 = x^2 + 12x + 36 \quad 32. \quad (x + 7)^2 = x^2 + 14x + 49$$