

Multiplying Binomials Answer Key

1. $x^2 + 4x - 5$	2. $x^2 - 14x + 24$	3. $x^2 - 12x + 27$	
4. $x^2 - 8x - 33$	5. $x^2 + 12x + 20$	6. $3x^2 + 7x - 20$	
7. $2x^2 - x - 21$	8. $4x^2 + 11x - 20$	9. $3x^2 + 12x - 15$	
10. $-x^2 + 14x - 24$	11. $-2x^2 + 24x - 54$	12. $4x^2 - 32x - 132$	13. $-3x^2 - 36x - 60$

Multiplying Binomials Part 2 Answer Key

1. $(x + 2)(x - 2) = x^2 - 4$	2. $(x + 3)(x - 3) = x^2 - 9$	3. $(x + 4)(x - 4) = x^2 - 16$
4. $(x + 5)(x - 5) = x^2 - 25$	5. $(x + 6)(x - 6) = x^2 - 36$	6. $(2x + 3)(2x - 3) = 4x^2 - 9$
7. $(3x + 1)(3x - 1) = 9x^2 - 1$	8. $(4x + 2)(4x - 2) = 16x^2 - 4$	Rule: $(a + b)(a - b) = a^2 - b^2$
9. $x^2 - 49$	10. $9x^2 - 4$	11. $16x^2 - 9$
12. $4x^2 - 16$	13. $x^2 - 64$	14. $x^2 - 100$
15. $x^2 - 81$	16. $9x^2 - 16$	17. $4x^2 - 1$

Expanding Vertex Form Answer Key

1. $x^2 + 12x + 36$	2. $x^2 - 10x + 25$	3. $x^2 + 6x + 9$
4. $x^2 - 20x + 100$	5. $x^2 + 14x + 49$	6. $-2x^2 - 24x - 72$
7. $4x^2 - 40x + 100$	8. $-x^2 - 6x - 9$	9. $5x^2 - 100x + 500$
10. $2x^2 + 28x + 98$	11. $-2x^2 - 24x - 76$	12. $4x^2 - 40x + 103$
13. $-x^2 - 6x - 2$	14. $5x^2 - 100x + 499$	15. $2x^2 + 28x + 103$

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