

DIRECTIONS: Find the product.

1. $(x + 8)(x - 8)$

2. $(4m - 7)(4m + 7)$

3. $(2x + 3y)(2x - 3y)$

4. $(v^2 - 11)(v^2 + 11)$

5. $(n^3 + 5p^2)(n^3 - 5p^2)$

6. $(w + 10)^2$

7. $(y - 6)^2$

8. $(2t + 9)^2$

9. $(12w - 5)^2$

10. $(4x + 7y)^2$

11. $(3m - 14n)^2$

12. $(c^2 - 1)^2$

13. $(2b^3 + 5p^2)^2$

14. $(r + 2)^3$

15. $(z - 8)^3$

16. $(3w + 4)^3$

17. $(2x - 5)^3$

18. $(10a + 7b)^3$

19. $(9m - 2n)^3$

20. $(v^2 + 6w)^3$

Sum & Difference

$$(a + b)(a - b) = a^2 - b^2$$

Example 1 $(x + 20)(x - 20) =$ _____

Example 2 $(10x - 9y)(10x + 9y) =$ _____

Binomial Square

$$(a + b)^2 = a^2 + 2ab + b^2$$

$$(a - b)^2 = a^2 - 2ab + b^2$$

Example 3 $(4x + 13)^2 =$ _____

Example 4 $(6x - 4y)^2 =$ _____

Binomial Cube

$$(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$$

$$(a - b)^3 = a^3 - 3a^2b + 3ab^2 - b^3$$

Example 5 $(x + 4)^3 =$ _____

Example 6 $(3y - 8)^3 =$ _____

Example 7 $(5z + 2k)^3 =$ _____