

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

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Algebra II

Square Binomial Theorem

1. Express $(m+7)^2$ as a trinomial

$$m^2 + 14m + 49$$

2. Express $(y-4)^2$ as a trinomial

$$y^2 - 8y + 16$$

3. Express $(x-9)^2$ as a trinomial

$$x^2 - 18x + 81$$

4. Express $(z+2)^2$ as a trinomial

$$z^2 + 4z + 4$$

5. Express $(x+1)^2$ as a trinomial

$$x^2 + 2x + 1$$

6. Express $(y+10)^2$ as a trinomial

$$y^2 + 20y + 100$$

7. Express $(n-8)^2$ as a trinomial

$$n^2 - 16n + 64$$

8. Express $(z-3)^2$ as a trinomial

$$\cancel{z^2 - 6z + 9}$$
$$z^2 - 6z + 9$$

9. Express $(2x-3)^2$ as a trinomial

$$4x^2 - 12x + 9$$

10. Express $(4x+2)^2$ as a trinomial

$$16x^2 + 16x + 4$$

11. Express $(4y - 5)^2$ as a trinomial

$$16y^2 - 40y + 25$$

12. Express $(3x - y)^2$ as a trinomial

$$9x^2 - 6xy + y^2$$

13. Express $(x - a)^2$ as a trinomial

$$x^2 - 2ax + a^2$$

14. Express $(y + b)^2$ as a trinomial

$$y^2 + 2by + b^2$$

15. Express $(x + k)^2$ as a trinomial

$$x^2 + 2kx + k^2$$

16. Express $(y - n)^2$ as a trinomial

$$y^2 - 2ny + n^2$$

17. Express $\sqrt{x^2 - 2cx} + \sqrt{c^2}$ as a binomial squared

$$(\sqrt{x} - c)^2$$

18. Express $\sqrt{n^2 + 2nq} + \sqrt{q^2}$ as a binomial squared

$$(\sqrt{n} + q)^2$$

19. Express $\sqrt{y^2 - 2yx} + \sqrt{x^2}$ as a square binomial

$$(\sqrt{y} - \sqrt{x})^2$$

20. Express $\sqrt{4a^2 - 4ab} + \sqrt{b^2}$ as a square binomial

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