

A perfect square trinomial is a trinomial in the form...

$$x^2 + 2xy + y^2 \text{ or } x^2 - 2xy + y^2$$

Perfect square trinomials can be factored into a binomial squared

$$x^2 + 2xy + y^2 = (x + y)^2 \quad x^2 - 2xy + y^2 = (x - y)^2$$

How to recognize a perfect square trinomial

$$x^2 + 10x + 25$$

when $a = 1$, we can ask does $2 \cdot \sqrt{c} = |b|$?

How to recognize a perfect square trinomial

$$x^2 + 12x + 36$$

when $a = 1$, we can ask does $2 \cdot \sqrt{c} = |b|$?

How to recognize a perfect square trinomial

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

when $a = 1$, we can ask does $2 \cdot \sqrt{c} = |b|$?

How to recognize a perfect square trinomial

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

when $a = 1$, we can ask does $2 \cdot \sqrt{c} = |b|$?

How to factor a perfect square trinomial

$$x^2 + 10x + 25$$

$$a = 1; b = 10; c = 25$$

Yes, $x^2 + 10x + 25$ is a perfect square trinomial

Draw parenthesis, put x in front, then the sign of b , then the \sqrt{c} .

How to factor a perfect square trinomial

$$x^2 + 12x + 36$$

$$a = 1; b = 12; c = 36$$

Yes, $x^2 + 12x + 36$ is a perfect square trinomial

Draw parenthesis, put x in front, then the sign of b , then the \sqrt{c} .

How to factor a perfect square trinomial

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

$$a = 1; b = -18; c = 81$$

Yes, $x^2 - 18x + 81$ is a perfect square trinomial

Draw parenthesis, put x in front, then the sign of b , then the \sqrt{c} .

How to factor a perfect square trinomial

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

$$a = 1; b = -6; c = 9$$

Yes, $x^2 - 6x + 9$ is a perfect square trinomial

Draw parenthesis, put x in front, then the sign of b , then the \sqrt{c} .