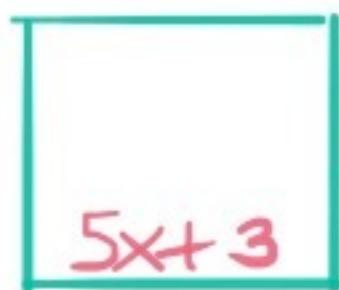


## Example 5 Perfect Square Trinomial



side length  $(5x+3)(5x+3)$

$$= 25x^2 + 15x + 15x + 9$$
$$= 25x^2 + 30x + 9$$

$25x^2 + 30x + 9 \rightarrow$  area of square

The expression above represents the area of the square.

Find the side length of the square.

$$\text{Area} = (\text{side length})^2$$

$$25x^2 + 30x + 9 = (5x+3)^2$$
$$a^2 + 2ab + b^2 = (a+b)^2$$
$$2 \cdot 5x \cdot 3$$

The side length of the square is  $5x+3$ .