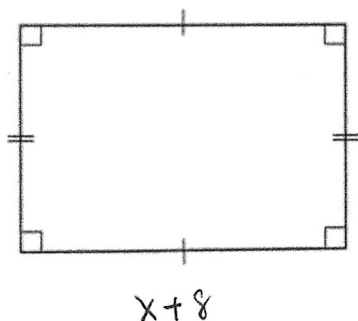


Do Now

- 1) The area of a rectangular playing field is $x^2 + 4x - 32$ inches. If its length is $x + 8$ inches, what is its width?



$$A = x^2 + 4x - 32$$

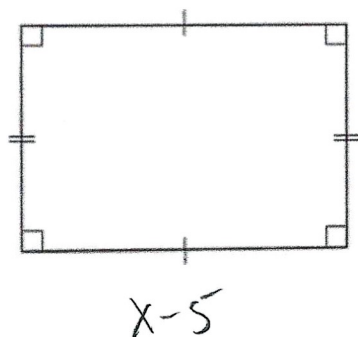
$$A = L \cdot w$$

$$\frac{x^2 + 4x - 32}{x + 8} = \frac{(x + 8) \cdot w}{x + 8}$$

$$\frac{(x - 4)(x + 8)}{x + 8} = w$$

$$w = x - 4$$

- 1) 2) The area of a rectangular playing field is $x^2 - 8x + 15$ inches. If its length is $x - 5$ inches, what is its width?



$$A = x^2 - 8x + 15$$

$$A = L \cdot w$$

$$\frac{x^2 - 8x + 15}{x - 5} = \frac{(x - 5) \cdot w}{x - 5}$$

$$\frac{(x - 3)(x - 5)}{x - 5} = w$$

$$w = x - 3$$