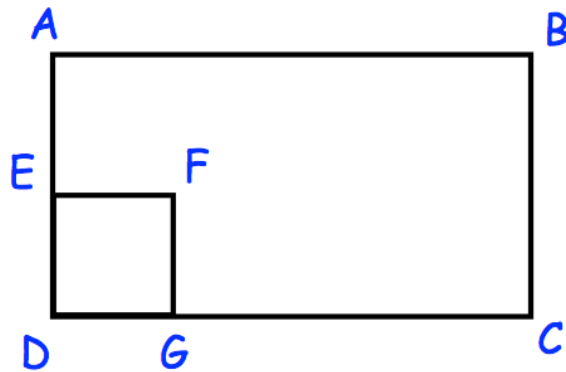


February 19th

A square DEFG is removed from a rectangle ABCD leaving an area of 411cm^2 .

If $AE = 11\text{cm}$ and $CG = 17\text{cm}$ find the area of the original rectangle.



Call the side of the square x cm

Then the area of ABCGFE =

$$(x + 11)(x + 17) - x^2 =$$

$$x^2 + 28x + 187 - x^2 =$$

$$28x + 187$$

Put this equal to 411

$$28x + 187 = 411$$

$$x = 8$$

Therefore the original rectangle has area $411 + 8 \times 8 = \mathbf{475\text{cm}^2}$