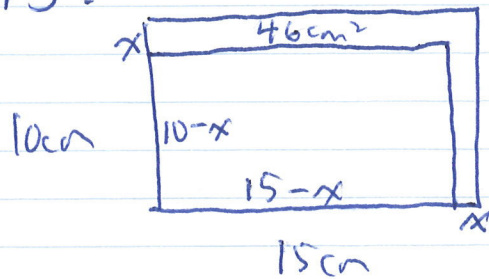


15.



$$A_{\text{original}} = 150 \text{ cm}^2$$

$$A_{\text{cropped}} = 150 \text{ cm}^2 - 46 \text{ cm}^2 \\ = 104 \text{ cm}^2$$

$$104 = (15-x)(10-x)$$

$$104 = 150 - 15x - 10x + x^2$$

$$x^2 - 25x + 46 = 0$$

$$x = \frac{-(-25) \pm \sqrt{(-25)^2 - 4(46)}}{2}$$

$$\text{or } (x-23)(x-2) = 0 \\ x = 23, x = 2.$$

$$x = \frac{25 \pm \sqrt{441}}{2}$$

$$x \stackrel{\text{is}}{=} 23$$

or

$$x \stackrel{\text{is}}{=} 2$$

↑

not possible.

∴ Cropped photo is 13 cm by 8 cm.