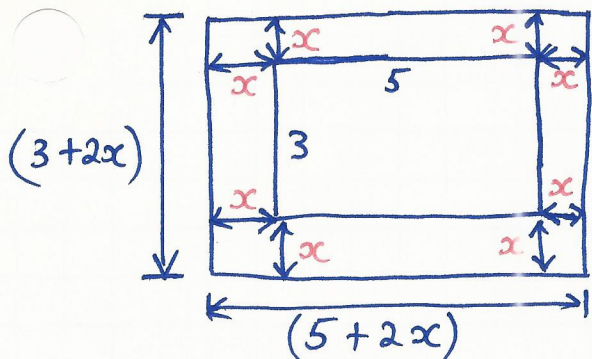


#4 Uniform = same all around.



Let x represent the uniform width of the border.

$$(5+2x)(3+2x) = 24$$

$$15 + 10x + 6x + 4x^2 = 24$$

$$4x^2 + 16x + 15 - 24 = 0$$

$$4x^2 + 16x - 9 = 0.$$

$$\begin{array}{l} p = -36 \\ s = 16 \end{array} \rightarrow -2, 18$$

$$\underbrace{4x^2 + 18x} - \underbrace{2x - 9} = 0$$

$$2x(2x+9) - (2x-9) = 0$$

$$(2x+9)(2x-1) = 0$$

$$2x+9=0 \text{ or } 2x-1=0$$

$$2x = -9$$

$$x = -\frac{9}{2}$$

$$\text{or } x = \frac{1}{2}$$

\rightarrow N/A
as $x > 0$

\therefore The uniform width of the border is $\frac{1}{2}$ m long.