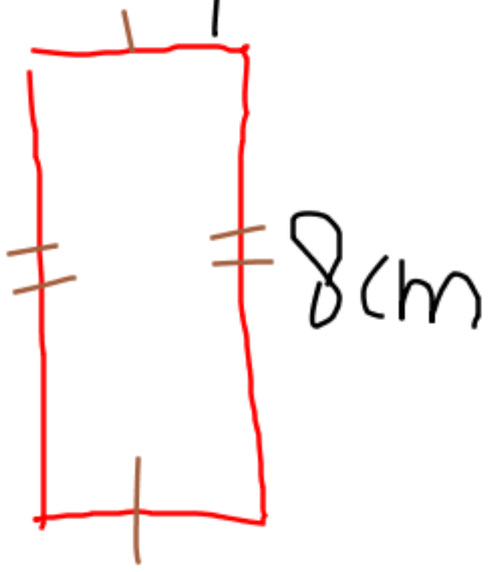
p. 87 Optimizing Areas and Perimeters



$A = l \times w$

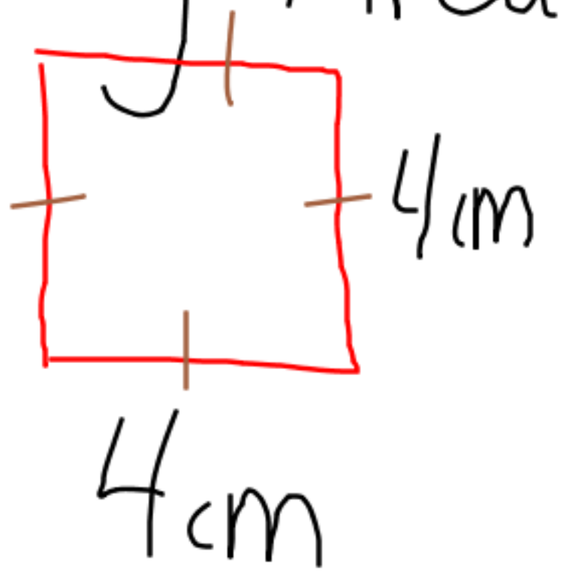
$A = 8 \times 2$

$A = 16\ cm^2$

$P = 2l + 2w$

$P = 2(8) + 2(2)$

$P = 20\ cm$

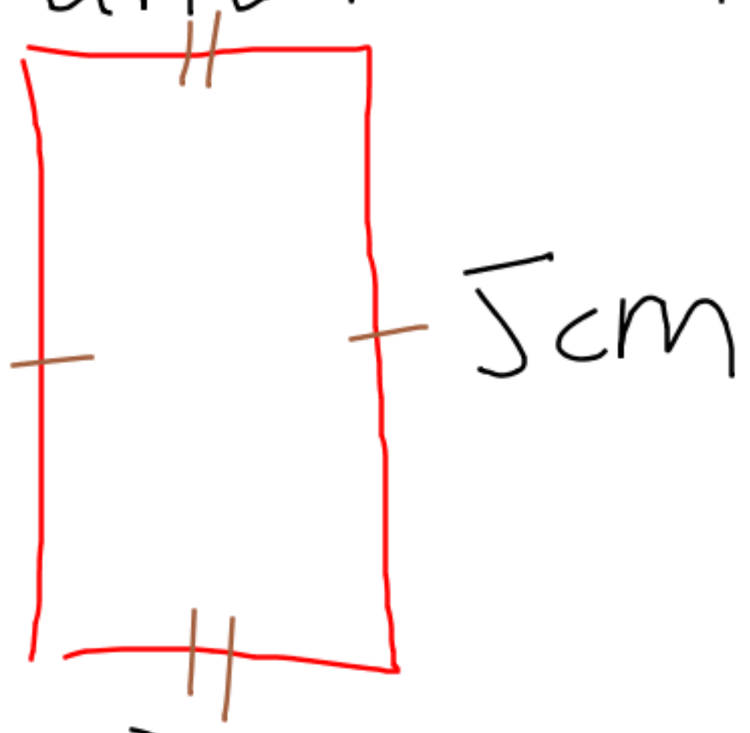


$A = 4 \times 4$

$A = 16\ cm^2$

$P = 4(4)$

$P = 16\ cm$



$A = 3 \times 5$

$A = 15\ cm^2$

$P = 2(5) + 2(3)$

$P = 16cm$

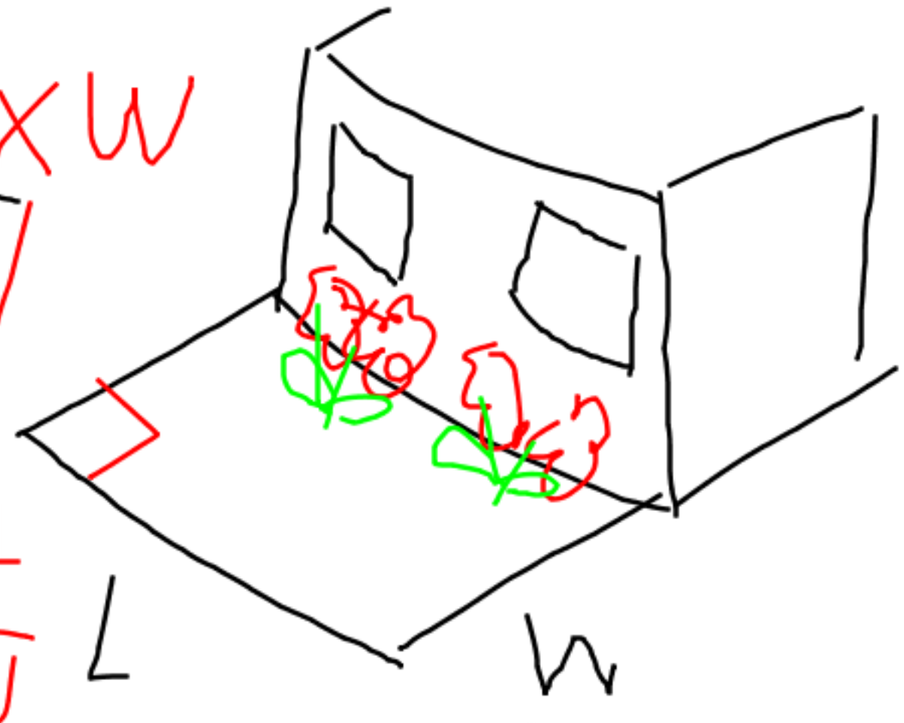
P. 91

b) The garden should have an area of $40m^2$.

$A = l \times w$

$\frac{A}{l} = \frac{l \times w}{l}$

$l = \frac{A}{w}$



Find the minimum perimeter and the dimensions (whole numbers only).

$P = 2w + l$

Area = $40m^2$

Length	Width	Perimeter
40	1	42
20	2	24
10	4	18
8	5	18
5	8	21
4	10	24
2	20	42
1	40	81