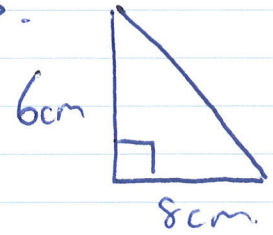
5.4

pg 293

13.



$A = \frac{bh}{2}$

$20 = \frac{(8-x)(6-x)}{2}$

let x = decrease in side length

$40 = (8-x)(6-x)$

$40 = 48 - 14x + x^2$

$x^2 - 14x + 8 = 0$

$x = \frac{-(-14) \pm \sqrt{(-14)^2 - 4(1)(8)}}{2}$

$x = \frac{14 \pm \sqrt{164}}{2}$

$x = 13.4\text{cm}$ ↑ not possible.

or $\boxed{x \doteq 0.6\text{cm}}$