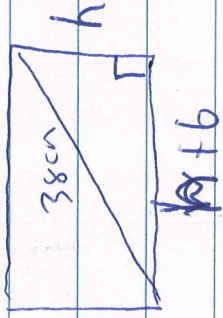


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#14



$$38^2 = (h+6)^2 + h^2$$

$$1444 = h^2 + 12h + 36 + h^2$$

$$0 = 2h^2 + 12h - 1408$$

$$0 = h^2 + 6h - 704$$

$$h = \frac{-6 \pm \sqrt{6^2 - 4(-704)}}{2}$$

$$h = \frac{-6 \pm \sqrt{2852}}{2}$$

$$h = 23.7 \text{ cm} \text{ or } h = \cancel{29.7}$$

inadmissible

∴ dimensions are 23.7 cm and $23.7+6 = 29.7$ cm