



Q5

$$\begin{aligned} \text{a) i - } & 32\text{m} - 2\text{m} \\ & = 30\text{m} \div 1.5\text{m} \\ & = 20 \text{ TIMES.} \end{aligned}$$

CATRINE THREW THE STICK 20 TIMES, AFTER HER FIRST 2m THROW. (\therefore 21 TOTAL THROWS)

(ii)

b) ~~✖~~



$$c) i - y = x^2 - 8x + 4$$

$$\text{VERTEX} \rightarrow y' = 2x - 8$$

$$\therefore 2x - 8 = 0$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$\therefore x = 4$$

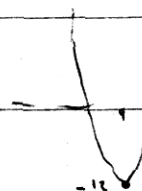
(SUB IN ORIGINAL EQUATION)

$$\therefore y = 4^2 - 8(4) + 4$$

$$y = 16 - 32 + 4$$

$$y = -12$$

$$\therefore \text{VERTEX} = (4, -12)$$



ii - $y = x^2 - 8x + 4$

~~$y = 2$~~

~~$y = 2(2) - 8$~~

~~$y = 4 - 8$~~

~~$y = -4$~~