



Solve

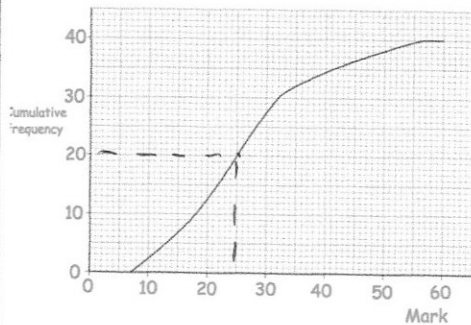
$$8(x - 2) - 3(1 - x) \leq 9(x + 2) + 1$$

$$8x - 16 - 3 + 3x \leq 9x + 18 + 1$$

$$11x - 19 \leq 9x + 19$$

$$2x \leq 38$$

$$x \leq 19$$



Estimate the median mark.

25 marks

Convert $0.1\bar{3}\bar{9}$ to a fraction

$$x = 0.13939\dots$$

$$10x = 1.3939\dots$$

$$1000x = 139.3939\dots$$

$$990x = 138$$

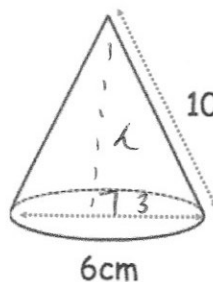
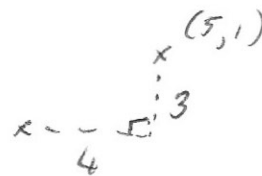
$$x = \frac{138}{990}$$

$$x = \frac{23}{165}$$

The line passing through $(1, p)$ and $(5, 1)$ has a gradient of $\frac{3}{4}$

Find the value of p .

$$1 - 3 = -2$$



$$h^2 = 10^2 - 3^2$$

$$10\text{cm} = 91$$

$$h = \sqrt{91}$$

6cm

Calculate the volume of the cone.

$$V = \frac{1}{3} \times \pi \times 3^2 \times \sqrt{91}$$

$$= 89.9 \text{ cm}^3$$