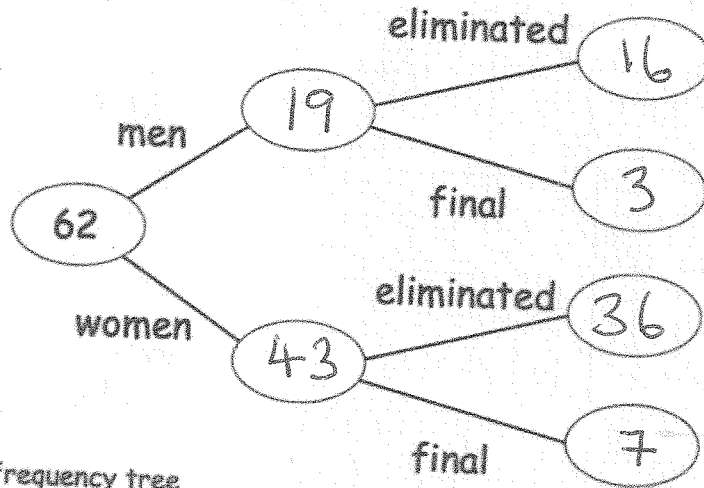


# M3 = 20 days to go!

62 people took part in a talent show  
 43 of the people were women.  
 10 people made it through to the final and the rest were eliminated.  
 3 men made it through to the final

A frequency tree just splits up



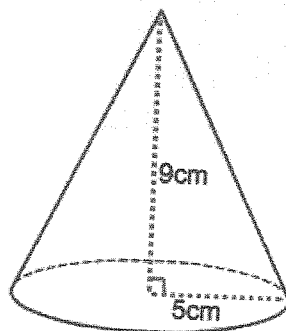
a) Complete the frequency tree

b) What fraction of the men made it through to the final?

3 men out of 19 men Fraction =  $\frac{3}{19}$

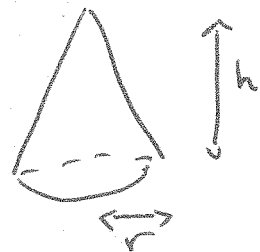
must be 7 because 10 made it to the final

1. A cone has base radius 5cm and perpendicular height 9cm.



Formula page

$$V = \frac{1}{3} \pi r^2 h$$



Work out the volume of the cone.

$$V = \frac{1}{3} \times \pi \times 5^2 \times 9$$

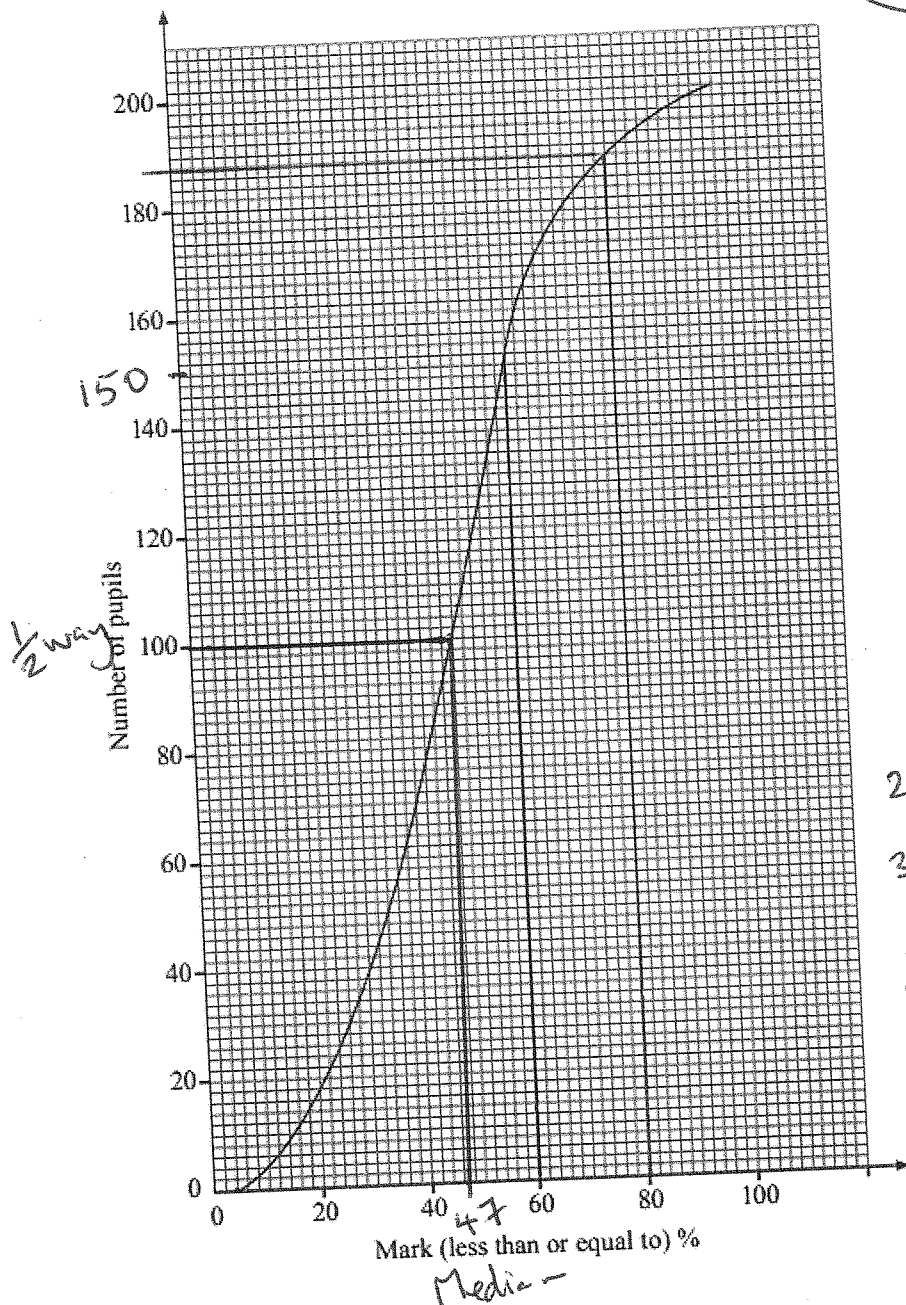
$$V = 75\pi \text{ exact answer}$$

$$V = 235.6$$

$$\underline{\quad\quad\quad} \text{cm}^3 \text{ (nearest cm}^3\text{)}$$

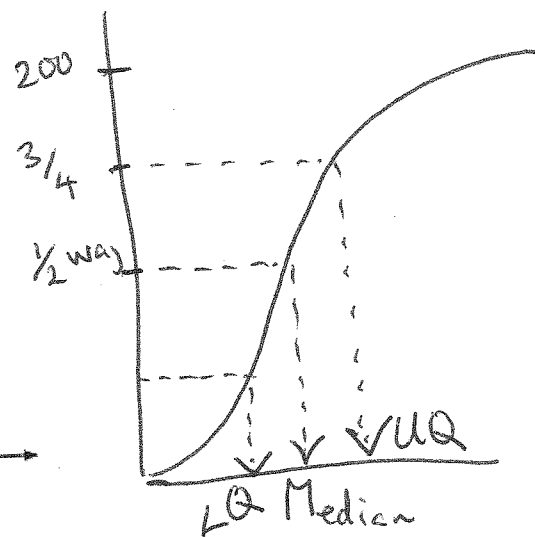
(3)

22 Two hundred pupils sat an English test. The cumulative frequency curve for the percentage marks gained is shown.



Cumulative means adding on

With a cumulative freq curve you can get the median and UQ and LQ



(a) Use the graph to complete table (i) and hence table (ii) below:

(i)

Percentage Mark	Cumulative Frequency
$\leq 20$	18
$\leq 40$	70
$\leq 60$	150
$\leq 80$	188
$\leq 100$	200

[1]

(ii)

Percentage Mark	Frequency
$0 < p \leq 20$	18
$20 < p \leq 40$	52
$40 < p \leq 60$	80
$60 < p \leq 80$	38
$80 < p \leq 100$	12

[2]

←  $150 - 18 - 52$   
 ←  $188 - 80 - 52 - 18$   
 $200 - 38 - 80 - 52 - 18$

(b) Use the graph to estimate the median mark.

Answer 47 [1]