

## Representing Statistical Data

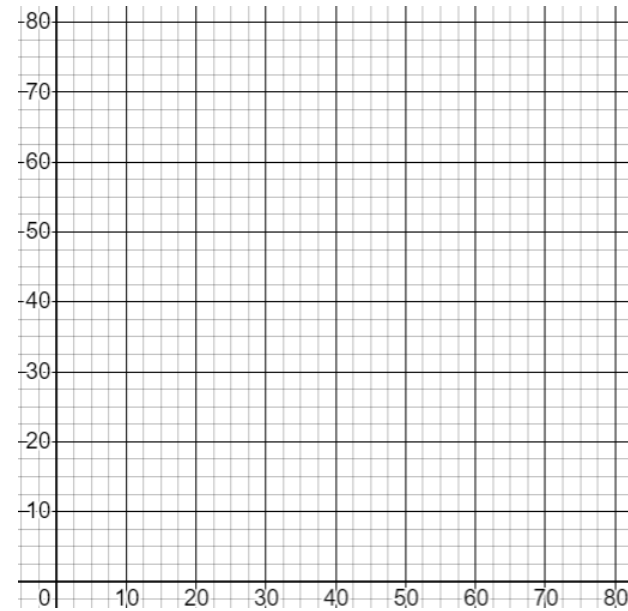
**1.** The length in mm of 80 leaves is recorded in a grouped frequency table.

Length $L$ (mm)	Frequency
$20 < L \leq 30$	4
$30 < L \leq 40$	7
$40 < L \leq 50$	15
$50 < L \leq 60$	23
$60 < L \leq 70$	22
$70 < L \leq 80$	9

(a) Complete a cumulative frequency table.

Length $L$ (mm)	Cumulative Frequency
$20 < L \leq 30$	
$20 < L \leq 40$	
$20 < L \leq 50$	
$20 < L \leq 60$	
$20 < L \leq 70$	
$20 < L \leq 80$	

(b) Plot a cumulative frequency graph.



(c) Find the median length.

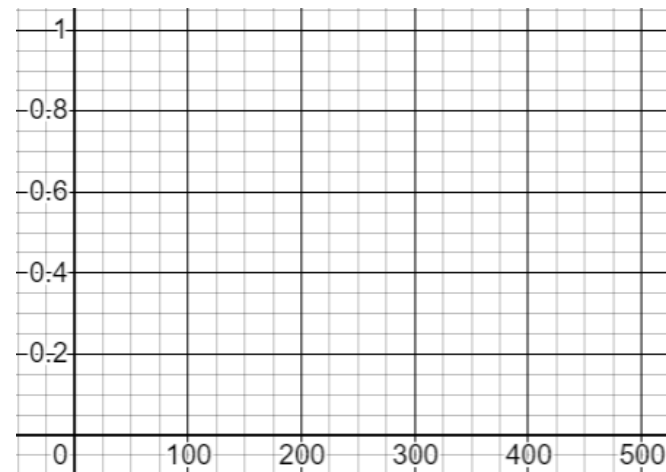
(d) Find the interquartile range of lengths.

(e) Find an estimate for the number of leaves greater than 75 mm in length.

**2.** The areas in  $m^2$  of 200 gardens are recorded in a grouped frequency table.

Area ( $m^2$ )	Frequency		
$0 < A \leq 50$	10		
$50 < A \leq 100$	25		
$100 < A \leq 200$	80		
$200 < A \leq 300$	65		
$300 < A \leq 500$	20		

(a) Plot a histogram.



(b) Use your histogram to estimate the number of gardens that are larger than  $220 m^2$ .

(c) Use your histogram to estimate the median garden size.