



Exercise 14G

Question 9:

Arrange the terms in an ascending order, we have

Variate	15	17	20	22	25	30
Frequency	3	5	9	4	6	10

Now preparing the cumulative frequency , we have

Variate	Frequency	Cumulative Frequency
15	3	3
17	5	8
20	9	17
22	4	21
25	6	27
30	10	37

Here $n = 37$, which is odd

$$\begin{aligned}\therefore \text{median} &= \left(\frac{n+1}{2} \right) \text{th term} \\ &= \left(\frac{37+1}{2} \right) \text{th term} \\ &= 19 \text{th term}\end{aligned}$$

= frequency of the 19th ~~variate~~

But the above table shows that the frequency of ~~variates~~ from 18th term to 21st term is 22

So the frequency of 19th term will be 22

\therefore Median = 22

***** END *****