

Exercise 14H

Question 12:

We may prepare the table, given below:

Weight (in	No of	Cumulative	
kg)	students	Frequency	f×x
(x)	(f)		
47	4	4	188
50	3	7	150
53	2	9	106
56	2	11	112
60	4	15	240
	$\sum f = N = 15$		$\sum f \times x = 796$

Here, $\sum f \times x=796$, and $\sum f = 15$

$$\therefore \qquad \text{mean} = \frac{\sum f \times x}{\sum f} = \frac{796}{15} = 53.06$$

:. mean = 53.06

Here, N = 15 which is odd

$$\therefore \quad median = \left(\frac{n+1}{2}\right) th \ term$$

$$= \left(\frac{15+1}{2}\right) th \ term = 8th \ term$$

value of the 8th term = 53

∴ median =53

Thus, mean = 53.06, median = 53 and mode = 52.88