

STATISTICS (Q 7, PAPER 2)

LESSON NO. 3: WEIGHTED MEAN

2005

7 (a) Calculate the weighted mean of 10, 30 and 15, given that the weights are 3, 1 and 2, respectively.

SOLUTION

$$\bar{w} = \frac{\sum wx}{\sum w} = \frac{90}{6} = 15$$

x	w	wx
10	3	30
30	1	30
15	2	30
	6	90

$$\bar{w} = \frac{\sum wx}{\sum w} \dots \dots \textcircled{3}$$

2000

7 (a) Find the weighted mean of 11, 15, 19 and 21 if the weights are 2, 3, 1 and 2 respectively.

SOLUTION

$$\bar{w} = \frac{\sum wx}{\sum w} = \frac{128}{8} = 16$$

x	w	wx
11	2	22
15	3	45
19	1	19
21	2	42
	8	128

$$\bar{w} = \frac{\sum wx}{\sum w} \dots \dots \textcircled{3}$$