

# High School Assignment

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## 1 2018-ICSE-10th board-Problem : 8(b)

**Problem** : If the mean of the following distribution is 24, find the value of 'a'.

Table 1: Given table

Marks	0-10	10-20	20-30	30-40	40-50
Number of students	7	a	8	10	5

Table 2: Extended table from the problem

Intervals	Frequency ( $f_i$ )	Mid-Value ( $x_i$ )	$f_i x_i$
0-10	7	5	35
10-20	a	15	15a
20-30	8	25	200
30-40	10	35	350
40-50	5	45	225
	$\sum f_i = 30 + a$		$\sum f_i x_i = 810 + 15a$