EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Measures of Central Tendency

Grade : ICSE Grade X

1. Temperatures of 30 days are given below. Find the mean.

Temperature (in degree C)	26	27	28	30	31	32	34
No. of days	5	4	4	3	4	6	4

(i) $\frac{448}{15}$ °C (ii) $\frac{149}{5}$ °C (iii) $\frac{461}{15}$ °C (iv) $\frac{476}{15}$ °C (v) $\frac{446}{15}$ °C

2. A frequency distribution table is given below. Find the mean .

Class-Interval	2 - 10	10 - 18	18 - 26	26 - 34	34 - 42	42 - 50	50 - 58
Frequency	3	20	41	32	49	2	30

(i) $\frac{6088}{177}$ (ii) $\frac{1912}{59}$ (iii) $\frac{5911}{177}$ (iv) $\frac{5734}{177}$ (v) $\frac{5735}{177}$

3. Rainfall of 10 days are given below. Find the mean.

Rainfall (in mm)	11	13	14	15
No. of days	2	1	3	4

(i) $\frac{157}{10}$ mm (ii) $\frac{69}{5}$ mm (iii) $\frac{137}{10}$ mm (iv) $\frac{139}{10}$ mm (v) $\frac{147}{10}$ mm

4. The marks obtained by 14 students in a test are given below. Find the mean of their marks when the marks of each student is decreased by 8.

42 34 31 21 12 46 41 6 15 18 17 16 16 4

(i) $\frac{205}{14}$ (ii) $\frac{235}{16}$ (iii) $\frac{207}{14}$ (iv) $\frac{209}{14}$ (v) $\frac{179}{12}$

5. The following table shows the weights of 68 persons in a group. Find the mean weight.

Weight (in kg)	30 - 39	39 - 48	48 - 57	57 - 66	66 - 75
No. of persons	19	12	11	7	19

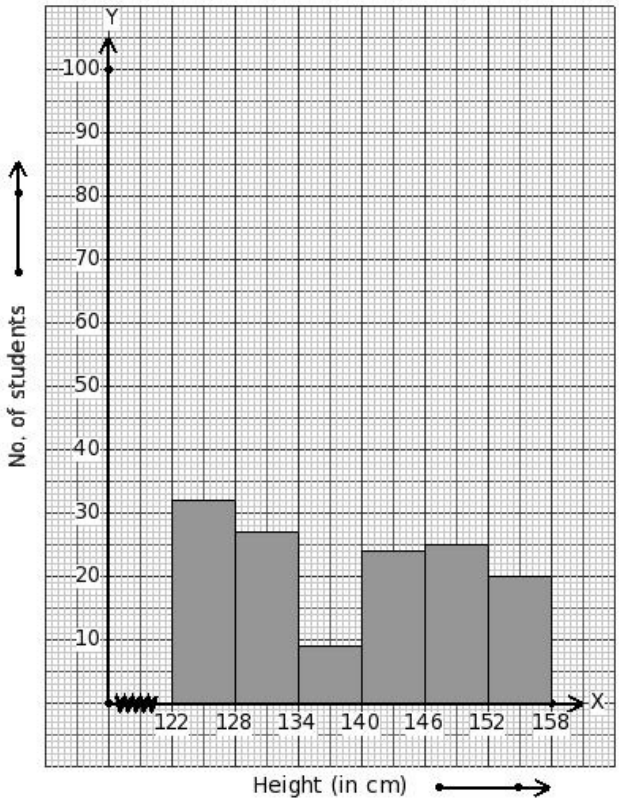
(i) $\frac{3527}{68}$ kg (ii) $\frac{3661}{68}$ kg (iii) $\frac{3525}{68}$ kg (iv) $\frac{1763}{34}$ kg (v) $\frac{3593}{68}$ kg

6. Ages of 10 students (in years) are given below. Find the mean age.

12 13 11 12 10 10 12 11 15 10

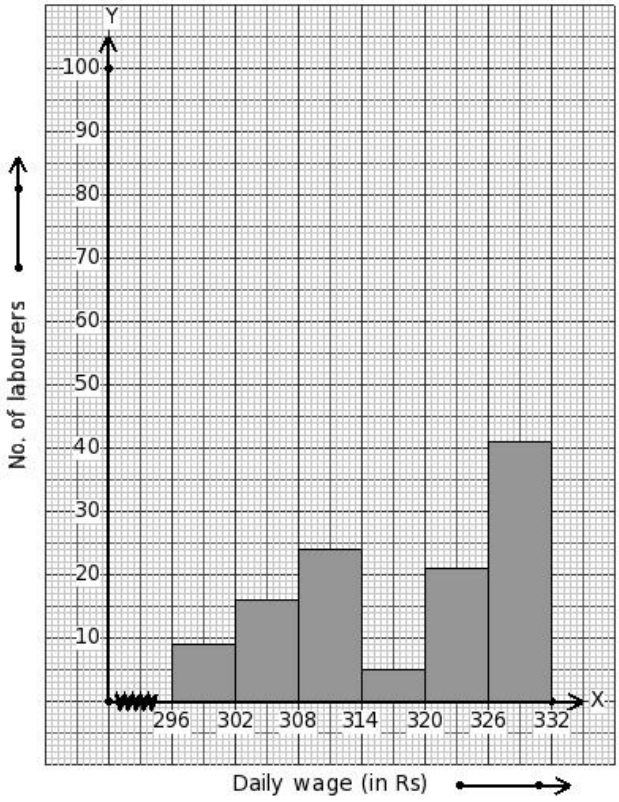
(i) $\frac{68}{5}$ years (ii) $\frac{63}{5}$ years (iii) $\frac{59}{5}$ years (iv) 12 years (v) $\frac{58}{5}$ years

7. Heights of 137 students (in cm) are given below. Calculate the mean height from the given histogram.



(i) 138.88 cm (ii) 121.88 cm (iii) 156.88 cm (iv) 122.88 cm (v) 143.88 cm

8. Daily wages of 116 labourers (in ₹) are given below. Calculate the mean wage from the given histogram.



(i) ₹318.03 (ii) ₹333.03 (iii) ₹291.03 (iv) ₹305.03 (v) ₹326.03

9. Given the mean of 12 samples as $4\frac{1}{6}$,

what is the new mean if two samples 10 and 4 are removed ?

(i) 4 (ii) $\frac{24}{7}$ (iii) $\frac{16}{5}$ (iv) $\frac{18}{5}$

10. The marks obtained by 11 students in a test are given below. Find the mean of their marks when the marks of each student is doubled.

35 30 3 14 37 36 1 39 26 32 26

(i) $\frac{558}{11}$ (ii) $\frac{458}{9}$ (iii) $\frac{560}{11}$ (iv) $\frac{556}{11}$ (v) $\frac{658}{13}$

11. If the mean of the following frequency distribution is $7\frac{2}{5}$,

find the value of 'x'.

Value	**Frequency**
3	2
4	6
5	4
6	7
7	5
8	2
9	2
10	3
11	x
12	6

(i) 1 (ii) 4 (iii) 2 (iv) 6 (v) 3

12. Ages of 25 students are given below. Find the mean.

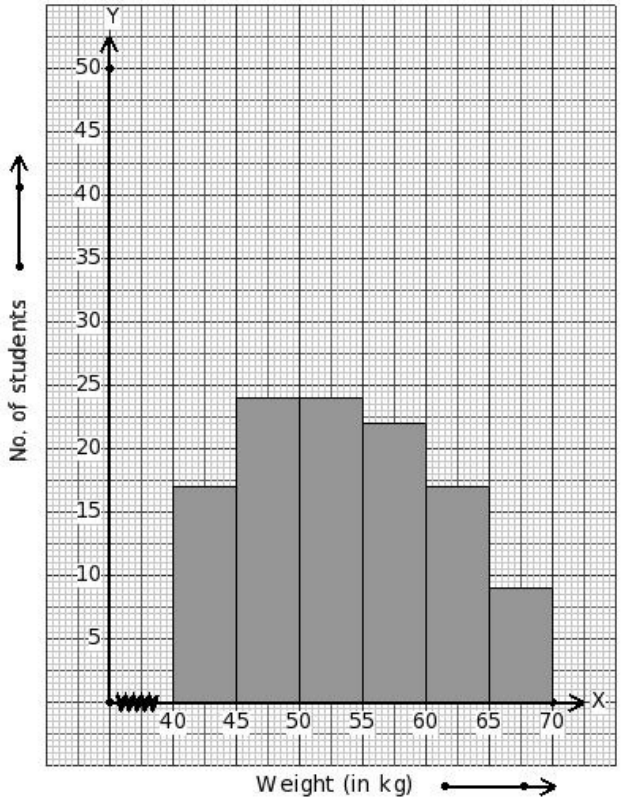
Age (in years)	10	11	12	13	14	15
No. of students	7	1	4	6	4	3

(i) $\frac{309}{25}$ years (ii) $\frac{62}{5}$ years (iii) $\frac{358}{25}$ years (iv) $\frac{333}{25}$ years (v) $\frac{308}{25}$ years

13. Find the mean of all prime numbers between 40 and 60.

(i) $\frac{339}{7}$ (ii) 49 (iii) $\frac{241}{5}$ (iv) $\frac{243}{5}$

14. The histogram given below represents the weights of students of a particular class. Using the data in the diagram, calculate the mean weight



(i) 53.61 kg (ii) 51.61 kg (iii) 55.61 kg (iv) 52.61 kg (v) 54.61 kg

15. The scores obtained by 7 students in a test are given below. Find the mean score. 2 20 11 17 8 8 14

(i) 2 (ii) 18 (iii) $11\frac{3}{7}$ (iv) 11 (v) 8

16. Heights of 30 students are given below. Find the mean.

Height (in cm)	138	146	147	148	149	158	159	174
No. of students	4	2	5	3	4	4	4	4

(i) $\frac{4613}{30}$ cm (ii) $\frac{4583}{30}$ cm (iii) $\frac{917}{6}$ cm (iv) $\frac{4643}{30}$ cm (v) $\frac{764}{5}$ cm

17. Given the mean of 5 samples as $10\frac{4}{5}$, what is the mean if a sample value is decreased by 13 ?

(i) $\frac{57}{7}$ (ii) $\frac{39}{5}$ (iii) $\frac{43}{5}$ (iv) $\frac{41}{5}$ (v) $\frac{25}{3}$

18. Find the mean of all prime numbers between 40 and 80.

(i) $\frac{297}{5}$ (ii) $\frac{179}{3}$ (iii) 59 (iv) $\frac{299}{5}$ (v) $\frac{415}{7}$

19. The marks obtained by 35 students of a class in an examination is given below. Calculate the mean mark correct to 2 decimal places.

Marks	less than 10	less than 15	less than 20	less than 25	less than 30
No. of students	5	10	19	26	35

(i) 18.93 (ii) 15.93 (iii) 23.93 (iv) 21.93 (v) 13.93

20. The mean of 7 numbers is $9\frac{6}{7}$. Upon excluding one number, the mean becomes $11\frac{1}{3}$. Find the excluded number.

(i) -2 (ii) 2 (iii) 4 (iv) 0 (v) 1

21. The daily wages of 116 workers in a factory are given below. Find the mean wage.

Wage (in rupees)	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
No. of workers	11	30	14	30	10	5	16

(i) ₹61.64 (ii) ₹63.64 (iii) ₹61.67 (iv) ₹62.64 (v) ₹61.66

22. The arithmetic mean of 28 22 8 37 4 41 8 13 is

(i) 19.12 (ii) 18.12 (iii) 21.12 (iv) 22.12 (v) 20.12

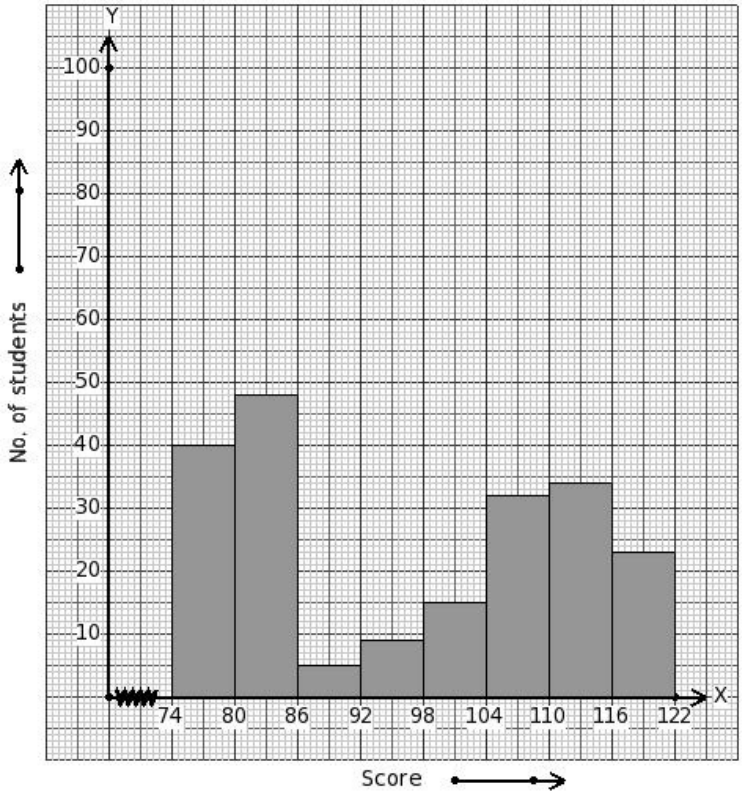
23. The arithmetic mean of a + 2, a, and a - 2 is

(i) a + 2 (ii) a - 2 (iii) 3a (iv) a

24. If the mean of 8 2 10 x 3 1 5 is $5\frac{1}{7}$, find the value of x.

(i) 6 (ii) 7 (iii) 4 (iv) 9 (v) 8

25. Scores of 206 students are given below. Calculate the mean score from the given histogram.



(i) 96.51 (ii) 93.51 (iii) 99.51 (iv) 91.51 (v) 101.51

Assignment Key

1) (v)	2) (iv)	3) (iii)	4) (iii)	5) (iii)	6) (v)
7) (i)	8) (i)	9) (iv)	10) (i)	11) (v)	12) (v)
13) (iv)	14) (i)	15) (iii)	16) (ii)	17) (iv)	18) (i)
19) (i)	20) (v)	21) (i)	22) (v)	23) (iv)	24) (ii)
25) (i)					