EduSahara™ Assignment

Name : Arithmetic Mean Miscellaneous Problems

Chapter : Measures of Central Tendency

Grade : ICSE Grade X

1. The scores obtained by 6 students in a test are given below. Find the mean score. 15 11 19 10 14 4

   (i) 4 (ii) 19 (iii) $12\frac{1}{2}$ (iv) $12\frac{1}{6}$ (v) 15

2. If the mean of 1 5 x 2 3 is 3, find the value of x.

   (i) 4 (ii) 1 (iii) 3 (iv) 5 (v) 7

3. Given the mean of 10 samples as $11\frac{1}{2}$, what is the mean if a sample value is increased by 10 ?

   (i) 13 (ii) $\frac{27}{2}$ (iii) $\frac{23}{2}$ (iv) $\frac{49}{4}$ (v) $\frac{25}{2}$

4. Given the mean of 10 samples as 9, what is the mean if a sample value is decreased by 14 ?

   (i) 8 (ii) $\frac{36}{5}$ (iii) $\frac{52}{7}$ (iv) $\frac{38}{5}$

5. Given the mean of 10 samples as $5\frac{3}{10}$,
   what is the new mean if two samples 5 and 10 are added ?

   (i) $\frac{19}{3}$ (ii) 5 (iii) 7 (iv) $\frac{27}{5}$ (v) $\frac{17}{3}$

6. Given the mean of 12 samples as $5\frac{11}{12}$,
   what is the new mean if two samples 7 and 1 are removed ?

   (i) $\frac{25}{4}$ (ii) $\frac{51}{8}$ (iii) $\frac{63}{10}$ (iv) $\frac{13}{2}$ (v) $\frac{61}{10}$

7. Find the mean of all prime numbers between 30 and 100.

   (i) $\frac{1055}{17}$ (ii) $\frac{931}{15}$ (iii) $\frac{929}{15}$ (iv) $\frac{311}{5}$ (v) $\frac{807}{13}$

8. Find the mean of all prime numbers between 30 and 100.

   (i) $\frac{311}{5}$ (ii) $\frac{929}{15}$ (iii) $\frac{807}{13}$ (iv) $\frac{931}{15}$ (v) $\frac{1055}{17}$

9. Find the mean of first 8 multiples of 9.

   (i) $\frac{81}{2}$ (ii) $\frac{79}{2}$ (iii) $\frac{161}{4}$ (iv) 41 (v) $\frac{83}{2}$

10. Find the mean of first 10 whole numbers.

(i) 5 (ii) $\frac{11}{2}$ (iii) $\frac{9}{2}$ (iv) $\frac{17}{4}$ (v) $\frac{7}{2}$

11. Find the mean of first 10 multiples of 5.

(i) $\frac{53}{2}$ (ii) $\frac{57}{2}$ (iii) 28 (iv) $\frac{55}{2}$ (v) $\frac{109}{4}$

12. Find the mean of the first 15 odd numbers.

(i) 12 (ii) 14 (iii) 15 (iv) 17 (v) 16

13. Find the mean of the first 20 even numbers.

(i) 22 (ii) 18 (iii) 24 (iv) 21 (v) 20

14. The marks obtained by 14 students in a test are given below. Find their mean marks.
42 11 38 33 24 28 38 14 13 27 6 14 49 43

(i) $\frac{244}{9}$ (ii) $\frac{136}{5}$ (iii) $\frac{188}{7}$ (iv) $\frac{192}{7}$ (v) $\frac{190}{7}$

15. 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 increased by 8.
9 34 19 9 42 45 19 27 8 10 15 7 41 11

(i) $\frac{204}{7}$ (ii) $\frac{262}{9}$ (iii) $\frac{206}{7}$ (iv) $\frac{146}{5}$ (v) $\frac{202}{7}$

16. 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 decreased by 5.
8 44 44 29 37 29 9 20 9 13 40

(i) $\frac{229}{11}$ (ii) $\frac{225}{11}$ (iii) $\frac{187}{9}$ (iv) $\frac{227}{11}$ (v) $\frac{267}{13}$

17. The marks obtained by 15 students in a test are given below. Find the mean of their marks when the marks of each student is doubled.
17 19 13 42 22 20 30 6 50 27 32 19 3 4 10

(i) $\frac{710}{17}$ (ii) $\frac{626}{15}$ (iii) 42 (iv) $\frac{628}{15}$

18. Heights of 14 students (in cm) are given below. Find the mean height.
126 166 137 128 161 137 143 149 143 142 127 147 152 150

(i) $\frac{1005}{7}$ cm (ii) $\frac{1018}{7}$ cm (iii) $\frac{1004}{7}$ cm (iv) $\frac{1011}{7}$ cm (v) $\frac{1006}{7}$ cm

19. Heights of 13 plants (in cm) are given below. Find the mean height.
65 80 96 78 67 77 97 84 82 84 70 99 75

(i) $\frac{1054}{13}$ cm (ii) $\frac{1055}{13}$ cm (iii) $\frac{1067}{13}$ cm (iv) $\frac{1056}{13}$ cm (v) $\frac{1080}{13}$ cm

20. Ages of 11 students (in years) are given below. Find the mean age.
11 12 13 11 15 14 13 14 12 13 11

(i) $\frac{139}{11}$ years (ii) $\frac{161}{11}$ years (iii) $\frac{141}{11}$ years (iv) $\frac{140}{11}$ years (v) $\frac{150}{11}$ years

21. Rainfall of 14 days (in mm) are given below. Find the mean rainfall.
13 8 12 8 7 9 6 15 14 5 14 8 8 10

(i) $\frac{151}{14}$ mm (ii) $\frac{165}{14}$ mm (iii) $\frac{139}{14}$ mm (iv) $\frac{69}{7}$ mm (v) $\frac{137}{14}$ mm

22. Scores of 15 students are given below. Find the mean score.
77 74 79 76 90 70 79 83 86 72 71 76 82 84 87

(i) $\frac{1216}{15}$ (ii) $\frac{1201}{15}$ (iii) $\frac{1186}{15}$ (iv) $\frac{1187}{15}$ (v) $\frac{396}{5}$

23. Temperatures of 10 days (in °C) are given below. Find the mean temperature.
25 32 31 29 31 28 29 31 26 26

(i) 29 °C (ii) $\frac{154}{5}$ °C (iii) $\frac{149}{5}$ °C (iv) $\frac{144}{5}$ °C (v) $\frac{146}{5}$ °C

24. Weights of 15 students (in kg) are given below. Find the mean weight.
46 41 48 57 59 43 53 60 52 49 42 48 41 50 52

(i) $\frac{248}{5}$ kg (ii) $\frac{249}{5}$ kg (iii) $\frac{252}{5}$ kg (iv) $\frac{257}{5}$ kg (v) $\frac{247}{5}$ kg

25. Daily wages of 15 labourers (in ₹) are given below. Find the mean wage.
472 328 416 466 387 487 374 462 321 471 449 465 300 393 305

(i) ₹406.60 (ii) ₹406.80 (iii) ₹408.40 (iv) ₹407.40 (v) ₹406.40

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

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

27. The arithmetic mean of 37 20 43 36 27 5 is

(i) 28 (ii) 30 (iii) 27 (iv) 26 (v) 29

28. If the mean of 5 samples is $24\frac{4}{5}$,
what is the new mean if 4 is added to each number.

(i) $\frac{88}{3}$ (ii) $\frac{146}{5}$ (iii) $\frac{144}{5}$ (iv) $\frac{200}{7}$ (v) $\frac{142}{5}$

29. If the mean of 6 samples is $28\frac{1}{6}$,
what is the new mean if 8 is subtracted from each number.

(i) $\frac{121}{6}$ (ii) $\frac{161}{8}$ (iii) $\frac{81}{4}$ (iv) $\frac{41}{2}$ (v) $\frac{119}{6}$

30. If the mean of 8 samples is 27 ,
what is the new mean if each number is multiplied by 8 .

(i) 217 (ii) 218 (iii) 215 (iv) 213 (v) 216

31. The mean of 7 numbers is 9 . Upon excluding one number, the mean becomes $9\frac{2}{3}$. Find the excluded number.

(i) 6 (ii) 4 (iii) 5 (iv) 8 (v) 2

32. The mean of 5 numbers is $9\frac{2}{5}$. Upon adding one number, the mean becomes $9\frac{1}{3}$. Find the included number.

(i) 11 (ii) 9 (iii) 8 (iv) 7 (v) 10

33. The mean of the below random sample is $30\frac{1}{2}$. Find the missing quantity. x 43 24 26 30 21 50 16 41 25

(i) 30 (ii) 32 (iii) 28 (iv) 27 (v) 29

Assignment Key

1) (iv)	2) (i)	3) (v)	4) (iv)	5) (v)	6) (iii)
7) (ii)	8) (iv)	9) (i)	10) (iii)	11) (iv)	12) (iii)
13) (iv)	14) (v)	15) (i)	16) (iv)	17) (iv)	18) (iii)
19) (i)	20) (i)	21) (v)	22) (iii)	23) (iv)	24) (v)
25) (v)	26) (iv)	27) (i)	28) (iii)	29) (i)	30) (v)
31) (iii)	32) (ii)	33) (v)			