EduSahara™ Learning Center Assignment

Grade : Class VII, ICSE Chapter : Statistics

Name : Random Samples Metrics

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The scores obtained by 12 students in a test are

1. 8, 4, 13, 9, 6, 5, 14, 12, 6, 14, 10, 20

Find the range.

(i) 16 (ii) $10\frac{1}{12}$ (iii) $9\frac{1}{2}$ (iv) 4 (v) 20

The scores obtained by 6 students in a test are

2. 13, 17, 13, 15, 9, 20

Find the minimum score.

(i) 11 (ii) 20 (iii) 9 (iv) 14 (v) $14\frac{1}{2}$

The scores obtained by 7 students in a test are

3. 19, 17, 13, 1, 15, 15, 4

Find the maximum score.

(i) 15 (ii) 1 (iii) 12 (iv) 19 (v) 18

The scores obtained by 7 students in a test are

4. 15, 5, 19, 1, 17, 3, 7

Find the mean score.

(i) 19 (ii) 18 (iii) 1 (iv) 7 (v) $9\frac{4}{7}$

5. If the mean of 3, 9, 8, x, 5, 7 is $5\frac{1}{2}$, find the value of x.

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

6. Find the mean of all prime numbers between 10 and 90.

(i) $\frac{473}{10}$ (ii) $\frac{189}{4}$ (iii) $\frac{471}{10}$ (iv) $\frac{95}{2}$ (v) $\frac{379}{8}$

- 7. Find the mean of first 8 multiples of 10.
 - (i) 42 (ii) 44 (iii) 45 (iv) 46 (v) 48
- 8. Find the mean of first 10 whole numbers.

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

- 9. Find the mean of first 6 multiples of 10 .
 - (i) 32 (ii) 38 (iii) 35 (iv) 36 (v) 34
- 10. Find the mean of the first 15 odd numbers.
 - (i) 12 (ii) 15 (iii) 18 (iv) 14 (v) 16
- 11. Find the mean of the first 10 even numbers.
 - (i) 10 (ii) 12 (iii) 11 (iv) 13 (v) 8

The marks obtained by 15 students in a test are given below.

12. Find their mean marks.

(i)
$$\frac{83}{3}$$
 (ii) 27 (iii) $\frac{137}{5}$ (iv) $\frac{85}{3}$ (v) 29

The marks obtained by 14 students in a test are given below.

Find the mean of their marks when the marks of

 $^{13}\cdot$ each student is increased by $^2\cdot$

(i)
$$\frac{207}{7}$$
 (ii) $\frac{263}{9}$ (iii) $\frac{205}{7}$ (iv) 29 (v) $\frac{147}{5}$

The marks obtained by 14 students in a test are given below.

Find the mean of their marks when the marks of

 $^{14}\cdot$ each student is decreased by $^{3}\cdot$

(i)
$$\frac{134}{7}$$
 (ii) $\frac{138}{7}$ (iii) $\frac{98}{5}$ (iv) $\frac{136}{7}$ (v) $\frac{58}{3}$

The marks obtained by 13 students in a test are given below.

15 Find the mean of their marks when the marks of each student is doubled.

(i)
$$\frac{542}{11}$$
 (ii) $\frac{638}{13}$ (iii) $\frac{246}{5}$ (iv) $\frac{642}{13}$ (v) $\frac{640}{13}$

Heights of 10 students (in cm) are given below. Find the mean height.

16. 164 , 148 , 126 , 134 , 146 , 169 , 175 , 152 , 167 , 158

(i)
$$\frac{1539}{10}$$
 cm (ii) 154 cm (iii) $\frac{1549}{10}$ cm (iv) $\frac{1559}{10}$ cm (v) $\frac{1541}{10}$ cm

Heights of 15 plants (in cm) are given below. Find the mean height.

17. 71,72,87,100,94,97,76,97,93,70,62,60,100,87,56

(i)
$$\frac{1222}{15}$$
 cm (ii) $\frac{1252}{15}$ cm (iii) $\frac{1237}{15}$ cm (iv) $\frac{408}{5}$ cm (v) $\frac{1223}{15}$ cm

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

10, 13, 12, 13, 15, 15, 14, 14, 11, 15

(i)
$$\frac{67}{5}$$
 years (ii) $\frac{71}{5}$ years (iii) $\frac{66}{5}$ years (iv) $\frac{76}{5}$ years (v) $\frac{68}{5}$ years

Rainfall of 11 days (in mm) are given below. Find the mean rainfall.

19. 7,5,5,15,7,7,8,14,6,9,14

(i) 9 mm (ii)
$$\frac{97}{11}$$
 mm (iii) $\frac{98}{11}$ mm (iv) $\frac{108}{11}$ mm (v) $\frac{119}{11}$ mm

Scores of 14 students are given below. Find the mean score.

20. 76, 86, 75, 80, 71, 78, 80, 85, 84, 87, 82, 84, 90, 88

(i)
$$\frac{573}{7}$$
 (ii) 82 (iii) $\frac{580}{7}$ (iv) $\frac{587}{7}$ (v) $\frac{575}{7}$

Temperatures of 11 days (in °C) are given below. Find the mean temperature.

21. 27, 25, 25, 32, 30, 31, 31, 27, 25, 32, 27

(i)
$$\frac{323}{11}$$
 °C (ii) $\frac{314}{11}$ °C (iii) $\frac{312}{11}$ °C (iv) $\frac{313}{11}$ °C (v) $\frac{334}{11}$ °C

Weights of 10 students (in kg) are given below. Find the mean weight.

57 , 58 , 49 , 47 , 50 , 52 , 50 , 52 , 47 , 43

(i)
$$\frac{103}{2}$$
 kg (ii) $\frac{105}{2}$ kg (iii) 51 kg (iv) $\frac{101}{2}$ kg

Daily wages of 14 labourers (in ₹) are given below. Find the mean wage.

- 23. 420 , 403 , 327 , 367 , 331 , 449 , 459 , 444 , 406 , 425 , 494 , 335 , 399 , 456
 - (i) ₹409.21 (ii) ₹408.21 (iii) ₹410.21 (iv) ₹408.36 (v) ₹408.29
- The mean of the below random sample is $30\frac{7}{10}$. Find the missing quantity. 24.

x, 22, 42, 43, 49, 29, 27, 40, 15, 28

- (i) 14 (ii) 13 (iii) 10 (iv) 12 (v) 11
- Given the mean of 11 samples as $9\frac{6}{11}$, 25.

what is the mean if a sample value is increased by 12?

- (i) $\frac{119}{11}$ (ii) $\frac{117}{11}$ (iii) $\frac{97}{9}$ (iv) $\frac{137}{13}$ (v) $\frac{115}{11}$
- Given the mean of 6 samples as 14 ,
- 26. what is the mean if a sample value is decreased by 10 ?
 - (i) $\frac{37}{3}$ (ii) $\frac{35}{3}$ (iii) $\frac{61}{5}$ (iv) 13
- Given the mean of 10 samples as 7,
- 27. what is the new mean if two samples 1 and 10 are added?
 - (i) $\frac{13}{2}$ (ii) $\frac{29}{4}$ (iii) $\frac{15}{2}$ (iv) $\frac{27}{4}$ (v) $\frac{25}{4}$
- Given the mean of 12 samples as $4\frac{5}{12}$, 28.

what is the new mean if two samples 8 and 9 are removed?

- (i) $\frac{24}{7}$ (ii) $\frac{16}{5}$ (iii) 4 (iv) $\frac{18}{5}$
- 29. Find the mean of all prime numbers between 50 and 100.
 - (i) $\frac{220}{3}$ (ii) $\frac{366}{5}$ (iii) $\frac{364}{5}$ (iv) $\frac{368}{5}$ (v) $\frac{512}{7}$
- 30. Find the mean of all prime numbers between 10 and 90 .

(i)
$$\frac{471}{10}$$
 (ii) $\frac{189}{4}$ (iii) $\frac{473}{10}$ (iv) $\frac{379}{8}$ (v) $\frac{95}{2}$

Heights of 14 plants (in cm) are given below. Find the mean height.

- 31. 54,60,70,54,60,78,89,52,56,76,72,62,59,64
 - (i) 65 cm (ii) $\frac{454}{7}$ cm (iii) $\frac{453}{7}$ cm (iv) $\frac{467}{7}$ cm (v) $\frac{460}{7}$ cm

Assignment Key

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