## EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE

Chapter : Statistics

Name : Median of Raw Data

Licensed To: Teachers and Students for non-commercial use

The scores obtained by 11 students in a test are

1. 12,7,19,11,4,4,15,14,19,14,14

Find the median.

- (i) 4 (ii)  $12\frac{1}{11}$  (iii) 15 (iv) 14 (v) 19
- 2. Find the median of all prime numbers between 30 and 60.
  - (i) 46 (ii) 43 (iii) 42 (iv) 40 (v) 44
- 3. Find the median of all the factors of 10.
  - (i)  $\frac{9}{2}$  (ii)  $\frac{5}{2}$  (iii) 4 (iv)  $\frac{7}{2}$  (v)  $\frac{13}{4}$
- 4. Find the median of first 5 whole numbers.
  - (i) 2 (ii) 3 (iii) -1 (iv) 5 (v) 1
- 5. Find the median of all the factors of 30.
  - (i)  $\frac{21}{4}$  (ii)  $\frac{9}{2}$  (iii) 6 (iv)  $\frac{13}{2}$  (v)  $\frac{11}{2}$
- 6. Find the median of the first 20 odd numbers.
  - (i) 20 (ii) 17 (iii) 22 (iv) 19 (v) 21
- 7. Find the median of the first 20 even numbers.
  - (i) 21 (ii) 18 (iii) 20 (iv) 22 (v) 24

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

8 Find their median marks.

41, 33, 35, 16, 20, 26, 19, 15, 50, 21, 23, 1, 21

- (i) 21 (ii) 20 (iii) 22 (iv) 23 (v) 18
- Heights of 14 students (in cm) are given below. Find the median height.
- 9. 127 , 147 , 166 , 140 , 127 , 136 , 127 , 159 , 133 , 139 , 150 , 172 , 161 , 172
  - (i)  $\frac{289}{2}$  cm (ii)  $\frac{291}{2}$  cm (iii) 144 cm (iv)  $\frac{287}{2}$  cm
  - Heights of 12 plants (in cm) are given below. Find the median height.
- 10. 71,72,51,66,95,84,91,94,59,80,61,85
  - (i) 75 cm (ii) 78 cm (iii) 76 cm (iv) 74 cm (v) 77 cm
  - Ages of 11 students (in years) are given below. Find the median age.
- 11. 13, 15, 12, 15, 13, 13, 14, 13, 12, 14, 11
  - (i) 15 years (ii) 11 years (iii) 13 years (iv) 12 years (v) 14 years
  - Rainfall of 14 days (in mm) are given below. Find the median rainfall.
- 12. 11,8,6,9,10,5,10,9,7,12,9,5,15,12
  - (i) 11 mm (ii) 8 mm (iii) 7 mm (iv) 9 mm (v) 10 mm
- Scores of 12 students are given below. Find the median score.
- 13. 71,89,71,88,89,78,78,85,87,70,80,77
  - (i) 78 (ii) 79 (iii) 81 (iv) 77 (v) 80
  - Temperatures of 13 days (in °C) are given below. Find the median temperature.
- 14. 33 , 34 , 32 , 33 , 33 , 34 , 31 , 31 , 25 , 26 , 29 , 28 , 34
  - (i) 31  $^{\circ}$ C (ii) 33  $^{\circ}$ C (iii) 32  $^{\circ}$ C (iv) 34  $^{\circ}$ C (v) 30  $^{\circ}$ C
  - Weights of 10 students (in kg) are given below. Find the median weight.
- 15. 54 , 43 , 42 , 41 , 40 , 55 , 40 , 51 , 51 , 50
  - (i) 47 kg (ii)  $\frac{95}{2}$  kg (iii)  $\frac{93}{2}$  kg (iv)  $\frac{97}{2}$  kg
- Daily wages of 11 labourers (in  $\stackrel{\blacktriangleleft}{=}$ ) are given below. Find the median wage. 16.
  - Copyright © 2013-2014 Small Systems Computing Pvt. Ltd. All Rights Reserved.

The observations of an ungrouped data are  $x_1$  ,  $x_2$  ,  $2x_1$  and  $x_1 < x_2 < 2x_1$  .

17. If the mean and median of the data are equal to 30 ,

find the observations of the data

- (i) 21,30,42 (ii) 40,30,80
- (iii) 24,30,44 (iv) 20,30,40

The observations of an ungrouped data are  $\mathbf{x}_1$  ,  $\mathbf{x}_2$  ,  $\mathbf{x}_3$  and  $\mathbf{x}_1 < \mathbf{x}_2 < \mathbf{x}_3$  .

18. If the mean and median of the data are 30 and 20 respectively and  $x_3 - x_1 = 50$ ,

find 
$$x_1, x_2, x_3$$

- (i) 12,20,62 (ii) 14,20,64
- (iii) 10,20,60 (iv) 20,20,120

Given an even number of random samples with the middle two samples as

19. x + 14 and x + 21 and the median as  $27\frac{1}{2}$ ,

find the value of x.

(i) 11 (ii) 10 (iii) 7 (iv) 12 (v) 9

## **Assignment Key**

- 1) (iv)
- 2) (ii)
- 3) (iv)
- 4) (i)
- 5) (v)
- 6) (i) 7) (i)
- 8) (i)
- 9) (iv)
- 10) (iii)
- 11) (iii)
- 12) (iv)
- 13) (ii)
- 14) (iii)
- 15) (iii)
- 16) (ii)
- 17) (iv)
- 18) (iii)
- 19) (ii)