



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**CLASS 8**

**SUBJECT :Arithmetic**

**Work sheet 4 Answer key**

**Marks:15**

**DATA HANDLING(continued)**

**Date:10.4.2020**

Answer all the following questions( $1 \times 15 = 15$ )

1. Which of the following is not a central tendency of a data?

- (a) Mean
- (b) Median
- (c) Mode
- (d) Range

Solution:d)

2. The difference between the highest and the lowest observations in a data is its

- (a) frequency
- (b) width
- (c) range
- (d) mode

Solution: c)

3. A cricketer scored 38, 79, 25, 52, 0, 8, 100 runs in seven innings. The range of the runs scored is

- (a) 100
- (b) 92
- (c) 52
- (d) 38

Solution:

Range = Difference of the highest and lowest observation

Range is  $100 - 0 = 100$  (a)

4. If the mean of 3, 1, 5, x and 9 is 4, then the value of x is

- (a) 6
- (b) 4
- (c) 2
- (d) 0

Solution:

Mean of 3, 1, 5, x, 9 is 4

$$\Rightarrow \frac{3+1+5+x+9}{5} = 4$$

$$\frac{18+x}{5} = 4$$

$$18 + x = 20$$

$$\Rightarrow x = 20 - 18 = 2 \text{ (c)}$$

5. The number of goals scored by a football team in a series of matches are: 3, 5, 0, 1, 2, 0, 4, 1, 3. The median of this data is
- (a) 3
  - (b) 2
  - (c) 2.5
  - (d) 1

Solution:

Goals in the matches are:

3, 5, 0, 1, 2, 0, 4, 1, 3

Arranging in order: 0, 0, 1, 1, 2, 3, 4, 5

Which are 9 which is odd

$$\text{median} = \frac{9+1}{2} = 5\text{th term} = 2 \text{ (b)}$$

6. The median of the first 48 natural numbers is
- (a) 24.5
  - (b) 25
  - (c) 25.5
  - (d) 26

Solution: two middle most values are 24,25 as  $n=48$  is even, so  $(24+25) \div 2 = 24.5$

7. The mean of three different natural numbers is 40. If lowest is 19, what could be highest possible number of remaining two numbers?
- (a) 40
  - (b) 71
  - (c) 81
  - (d) 100

Solution:

The mean of three different natural numbers = 40

Lowest = 19, then highest possible of the remaining two numbers

$$\text{Total} = 40 \times 3 = 120$$

Lowest = 19

$$\text{Remaining total} = 120 - 19 = 101$$

Both of the remaining numbers are greater than 19

$$\text{So, if second is 20, then third} = 101 - 20 = 81$$

Highest = number = 81 (c)

8. The mode of the data:  
3, 5, 1, 2, 0, 2, 3, 5, 0, 2, 1, 6 is
- (a) 6
  - (b) 3
  - (c) 2
  - (d) 1

Solution:

Mode of 3, 5, 1, 2, 0, 2, 3, 5, 0, 2, 1, 6 = 2  
as it came highest times (c)

9. The marks in maths of a student are 75,86,78,83,85,76,90. The median score is
- a) 84
  - b) 75
  - d) 90
  - e) none of these

Solution: a)  $75, 76, 78, 83, 85, 86, 90, 96$  so  $(85+83) \div 2 = 84$

10. The number which occurs most frequently in a set of numbers is
- a) median
  - b) mode
  - c) mean
  - d) none of these

Solution: b) mode

11. The mean of first 5 natural numbers is
- a) 1.5
  - b) 2
  - c) 3
  - d) 2.5

Solution: c),  $(1+2+3+4+5) \div 5 = 3$

12. The mode of the data is :8, 8, 9, 7, 7, 6, 4, 5 is
- a) 8, 7
  - b) 7
  - c) 9
  - d) 8

Solution: a) 8, 7 both occur twice

13. The central most value of a data when arranged in order is
- a) median
  - b) mode
  - c) mean
  - d) none of these

Solution: a)

14. The marks of two boys is 50 and 3 girls is 60. The mean marks is
- a) 56
  - b) 50
  - c) 40
  - d) 60

Solution: a) ,  $(2 \times 50 + 3 \times 60) \div (2 + 3) = 56$

15. The total weight of students is 1500 kg and the average weight is 30 kg, then the number of students is

a) 11

b) 15

c) 10

d) 50

Solution: d) ,  $1500 \div 30 = 50$

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