

1) The numbers 2, 7, 11, 16 have frequencies $x + 6$, $x + 2$, $x - 3$ and x respectively. If their mean is 5.22, find the value of x . (Enter the value as next highest integer)

1 point

2) The mean and sample standard deviation of the dataset consisting of 10 observations is 15 and 11 respectively. Later it is noted that one observation 14 is wrongly noted as 11. What is the mean of the original dataset? (Correct to 2 decimal place accuracy)

1 point

3) The mean and sample standard deviation of the dataset consisting of 10 observations is 15 and 11 respectively. Later it is noted that one observation 14 is wrongly noted as 11. What is the sample variance of the original dataset? (Correct to 2 decimal place accuracy)

1 point

4) Let the data 79, 86, 95, 40, 48, 41, 59 represent the retail prices in rupees of a certain commodity in 7 randomly selected shops in a particular city. What will be the sample variance of the retail prices, if 4 rupees is added to all the retail prices. (Correct to 2 decimal place accuracy)

1 point

5) Suppose, we have 6 observations such that 44, 45, 40, 36, 87, 92. Calculate 10th, 50th and 100th percentiles? **1 point**

- ☐ 36, 45.5, 92
- ☐ 36, 43.5, 92
- ☐ 36, 44.5, 92
- ☐ 37, 45.5, 92

6) Suppose, we have 5 observations such that 29, 48, 30, 35, 99. Calculate the Inter Quartile Range (IQR) of the data. **1 point**

- ☐ 19
- ☐ 18
- ☐ 48
- ☐ 49

7) Suppose, we have 5 observations such that 29, 48, 30, 35, 99. How many outliers are there?

1 point

- ☐ 3
- ☐ 1
- ☐ 2
- ☐ 4

8) In a deck, there are cards numbered 1 to 29 such that the number of cards of a particular number in the deck is same as the number on the card. Which of the following statement(s) is/are true about the mean and mode of the numbers on this deck of card? **1 point**

- ☐ Mode is 29.
- ☐ Mean is 15.0.
- ☐ Mean is 29.
- ☐ Mode is not defined for this data.
- ☐ Mode is 28.
- ☐ Mean is 19.67.

9) Figure 3.1.G shows a stem and leaf plot of the ratings (out of 100) of an actor's performance in different movies.

Stem	Leaf
4	4 6
5	4 8
6	1 2 2
7	2 5 7 7 9
8	5

Figure 3.1.G: Performance rating of an actor.

Here 6 | 4 means Rating of 64

What is the median rating, if 1 points are added to all of his ratings and then converted to 40 points. (Correct up to 2 decimal point accuracy.)

1 point

10) Figure 3.1.G shows a stem and leaf plot of the ratings (out of 100) of an actor's performance in different movies.

Stem	Leaf
4	4 6
5	4 8
6	1 2 2
7	2 5 7 7 9
8	5

Figure 3.1.G: Performance rating of an actor.

Here 6 | 4 means Rating of 64

What is the Inter Quartile Range (IQR)? (Correct to 1 decimal point accuracy.)

1 point