

Math Test Paper: Surface Areas, MAD, and IQR

Total Marks: 30 Time: 60 minutes

Section A: Surface Areas (12 marks)

Q1. A rectangular prism has dimensions:

Length = 10 cm, Width = 4 cm, Height = 5 cm.

Find the total surface area. (3 marks)

Q2. A triangular prism has:

Base of triangle = 6 cm, Height of triangle = 5 cm, Length of prism = 4 cm.

Find the total surface area. (3 marks)

Q3. A rectangular prism with:

Length = 8 cm, Width = 6 cm, Height = 3 cm.

Calculate its total surface area. (3 marks)

Q4. A triangular prism has:

Base of triangle = 8 cm, Height = 6 cm, Length = 10 cm.

Find the total surface area. (3 marks)

Section B: Mean Absolute Deviation (MAD) (9 marks)

Q5. Find the MAD of the data set:

[5, 8, 12, 15, 10] (3 marks)

Q6. The ages (in years) of 6 students:

[14, 15, 13, 12, 15, 11]

Find the mean and then the MAD. (3 marks)

Q7. Number of books read by students:

[6, 9, 4, 5, 10, 8]

a) Find the mean.

b) Find the MAD. (3 marks)

Section C: Interquartile Range (IQR) (9 marks)

Q8. Find the IQR of the data:

[3, 6, 7, 8, 10, 12, 13, 15, 18] (3 marks)

Q9. Marks scored by 10 students:

[45, 50, 52, 55, 57, 60, 62, 65, 67, 70]

a) Find Q1 and Q3

b) Calculate the IQR. (3 marks)

Q10. Given data:

[21, 24, 24, 25, 27, 30, 32, 33, 35, 40, 42]

Find the IQR. (3 marks)