Statistics: Five-Number Summary & Box Plots (Grade 10)

WORKSHEET

Name: ..... Class: .....

Date: .....

MARK ____ / 17

Answer all questions. Show all your working — marks are awarded for method as well as the final answer.

1 The mean of 23, 31, 27, 35, 29 and x is 29. Solve for x. **(3)**

2 Find the mean of 4, 8, 9, 11, 13. **(2)**

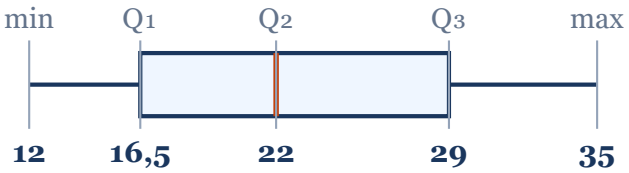
3 Find the median of 3, 7, 9, 12, 15, 18. **(2)**

4 Find the mode of 2, 5, 5, 7, 9, 5. **(1)**

5 Find the range of 12, 15, 18, 20, 35. **(1)**

6 For 12, 15, 18, 20, 22, 25, 28, 30, 35 find Q_1, Q_2 and Q_3. (3)

7 Using the box plot below of that summary, find the IQR. (1)



8 What does the line inside the box represent? (1)

9 What fraction of the data lies inside the box? (1)

10 A box plot has minimum 4, $Q_1 = 9$, median 14, $Q_3 = 21$ and maximum 30. Calculate the interquartile range, and state what fraction of the data lies inside the box. (2)

TOTAL: 17 marks

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