Multiple choice questions - Statistics: averages and grouped data

Year: Year 9 · 10

Question 1 The median of 2, 4, 6, 8, 10 is:

- ◯ **A.** 4
- ◯ **B.** 6
- ◯ **C.** 8
- ◯ **D.** 5

Question 2 The mean of 3, 5, 7, 9 is:

- ◯ **A.** 5
- ◯ **B.** 6
- ◯ **C.** 7
- ◯ **D.** 24

Question 3 The mode of 1, 2, 2, 3, 3, 3 is:

- ◯ **A.** 2
- ◯ **B.** 3
- ◯ **C.** 2.5
- ◯ **D.** 1

Question 4 The range of 5, 12, 8, 20 is:

- ◯ **A.** 15
- ◯ **B.** 20
- ◯ **C.** 12
- ◯ **D.** 5

Question 5 In a frequency table the mean is:

- ◯ **A.** $\Sigma f \div \Sigma x$
- ◯ **B.** $\Sigma xf \div \Sigma f$
- ◯ **C.** $\Sigma x \div$ number of rows
- ◯ **D.** $\Sigma f \div$ rows

Question 6 Which average is most affected by an outlier?

- ◯ **A.** mean
- ◯ **B.** median
- ◯ **C.** mode

- ◯ **D.** none

Question 7 The midpoint of $20 \leq x < 30$ is:

- ◯ **A.** 20
- ◯ **B.** 25
- ◯ **C.** 30
- ◯ **D.** 50

Question 8 A mean estimated from grouped data is:

- ◯ **A.** exact
- ◯ **B.** an estimate
- ◯ **C.** always too high
- ◯ **D.** always too low

Question 9 The modal class is the class with:

- ◯ **A.** the highest frequency
- ◯ **B.** the highest midpoint
- ◯ **C.** the lowest frequency
- ◯ **D.** the median

Question 10 The mean of 4 numbers is 10. Their total is:

- ◯ **A.** 14
- ◯ **B.** 40
- ◯ **C.** 2.5
- ◯ **D.** 10

Answer grid - Statistics: averages and grouped data

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Question	Answer	Explanation
1	**B**	The middle value.
2	**B**	24 ÷ 4.
3	**B**	Most frequent.
4	**A**	20 - 5.
5	**B**	Total of x × f over total frequency.
6	**A**	The mean uses every value.
7	**B**	(20 + 30) ÷ 2.
8	**B**	Midpoints are used.
9	**A**	Most common group.
10	**B**	Total = mean × n.