CALIFORNIA STATISTICS · UNIT 1 · 25 QUESTIONS

Exploring Data and Distributions — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The mean of 6, 10, 14, 18, 22 is**

- A 14
- B 12
- C 18
- D 16

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2 **The median of 4, 8, 12, 16, 20, 24 is**

A 12

B 16

C 14

D 20

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3 **The mode of 5, 5, 2, 8, 5, 2 is**

A 6

B 8

C 2

D 5

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4 **The range of 9, 17, 25, 33 is**

- A 9
- B 24
- C 17
- D 33

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5 **For the data 3, 5, 7, 9, 11, 13, 15, 17, the interquartile range is**

- A 6
- B 8
- C 10
- D 12

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6 **The population variance of 3, 5, 7, 9, 11 is**

A 8

B 6

C 10

D 4

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7 **In a normal distribution, about what percent of values lie within two standard deviations of the mean?**

A 50%

B 99.7%

C 95%

D 68%

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8 **For a score of 86 in a distribution with mean 70 and standard deviation 8, the z-score is**

- A 16
- B 3
- C 1
- D 2

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9 **In a normal distribution with mean 50 and standard deviation 5, a value 2 standard deviations below the mean is**

- A 45
- B 60
- C 40
- D 55

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10 **The standard deviation measures**

- A Spread around the mean
- B The most common value
- C The middle value of a data set
- D The largest - the smallest value

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11 **A distribution is skewed left. The mean is usually**

- A Greater than the median
- B Equal to the median
- C Equal to zero
- D Less than the median

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12 **An extreme outlier will usually affect the median less than the**

A Range

B Mean

C Mode

D Minimum

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13 **A survey that asks only students in one classroom is most likely**

A Biased

B A census

C A random sample

D An experiment

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14 **Collecting data from a part of a population is called a**

- A Sample
- B Experiment
- C Parameter
- D Census

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15 **The mass of each student in kilograms is an example of**

- A Categorical data
- B A parameter
- C Quantitative data
- D A bias

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16 **The favorite sport of each student is an example of**

A A statistic

B Categorical data

C A distribution

D Quantitative data

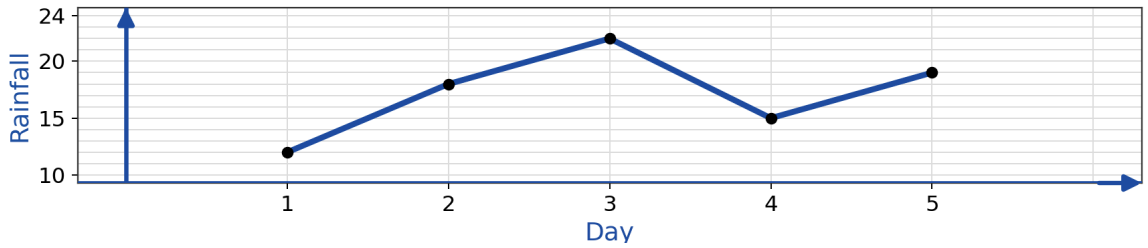
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17 **In a class of 50 students, 20 prefer swimming. What is the relative frequency of swimming as a decimal?**

ANSWER _____

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18 **The graph shows daily rainfall in millimeters over five days The highest rainfall shown is**



A 18

B 15

C 12

D 22

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19 **A boxplot shows the median and the quartiles of a data set The whiskers in the plot extend toward the**

A First quartile only

B Mean only

C Minimum and maximum values

D Zero only

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20 **The 25th percentile of a data set means about 25 percent of values are**

A Equal to that value

B At or below that value

C Missing

D Above that value

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21 **A histogram with one clear peak is described as**

A Bimodal

B Unimodal

C Uniform

D Skewed only

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22 **In a frequency table, the counts 6, 9, and 5 add to a total of**

ANSWER _____

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23 **Which display is best for showing the parts of a whole for categories?**

A. A boxplot

B. A pie chart

C. A histogram

D. A scatterplot

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24 **A voluntary response survey posted online is most likely to suffer from**

- A No bias
- B Perfect accuracy
- C Random error only
- D Self selection bias

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25 **The mean of 15, 25, 35, 45, 55 is**

ANSWER _____

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ANSWER KEY

1. A
2. C
3. D
4. B
5. B
6. A
7. C
8. D
9. C
10. A
11. D
12. B
13. A
14. A
15. C
16. B
17. 0.4
18. D
19. C
20. B
21. B
22. 20
23. B
24. D
25. 35

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