ARIZONA STATISTICS · UNIT 1 · 25 QUESTIONS

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 4, 8, 12, 16, 20 is**



A 10

B 12

C 14

D 16

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2 **The median of 5, 9, 13, 17, 21, 25 is**

- A 13
- B 17
- C 15
- D 21

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3 **The mode of 7, 7, 3, 9, 7, 3 is**

- A 7
- B 3
- C 9
- D 6

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4 **The range of 11, 19, 27, 35 is**

A 11

B 35

C 24

D 19

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5 For the data 2, 4, 6, 8, 10, 12, 14, 16, the interquartile range is



A 5

B 13

C 8

D 10

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6 **The population variance of 2, 4, 6, 8, 10 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 one standard deviation of the mean?**



A 50%

B 68%

C 95%

D 99.7%

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8 **For a score of 92 in a distribution with mean 80 and standard deviation 6, the z-score is**

- A 1
- B 2
- C 3
- D 12

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9 **In a normal distribution with mean 100 and standard deviation 10, a value 2 standard deviations above the mean is**

- A 80
- B 90
- C 110
- D 120

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10 **The standard deviation measures**

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

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

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

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12 **An extreme outlier will usually affect the mean more than the**



A Median

B Range

C Mode

D Maximum

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

- A A random sample
- B Biased
- C A census
- D An experiment

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14 **Collecting data from every member of a population is called a**

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

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15 **The height of each student in centimeters is an example of**

A Quantitative data

B Categorical data

C A parameter

D A bias

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



A Quantitative data

B Categorical data

C A statistic

D A distribution

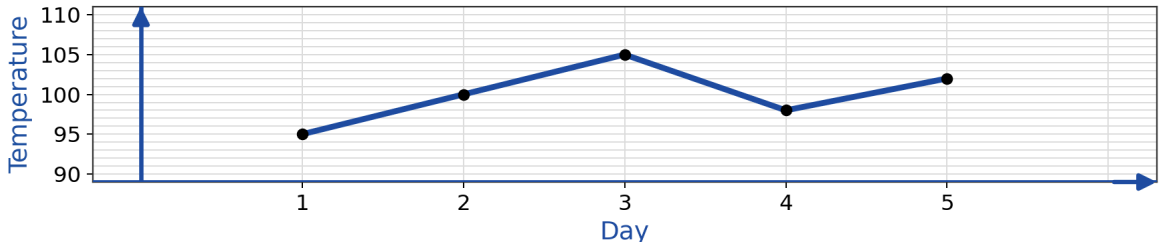
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17 **In a class of 40 students, 12 prefer hiking. What is the relative frequency of hiking as a decimal?**

ANSWER

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18 **The graph shows daily high temperatures in Phoenix over five days The highest temperature shown is**



A 95

B 100

C 105

D 110

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19 **A boxplot shows the median and the quartiles of a data set The box in the plot spans from**

- A The minimum to the maximum
- B The first quartile to the third quartile
- C The mean to the median
- D Zero to the mean

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20 **The 75th percentile of a data set means about 75 percent of values are**

- A Above that value
- B Equal to that value
- C At or below that value
- D Missing

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21 **A histogram with two clear peaks is described as**

A Unimodal

B Bimodal

C Symmetric

D Uniform

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22 **In a frequency table, the counts 5, 8, and 7 add to a total of**

ANSWER _____

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23 **Which display is best for showing the shape of a quantitative distribution?**

A A histogram

B A pie chart

C A bar chart of categories

D A two way table

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



A Random error only

B Self selection bias

C No bias

D Perfect accuracy

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25 **The mean of 10, 20, 30, 40, 50 is**

ANSWER

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ANSWER KEY

1. B
2. C
3. A
4. C
5. C
6. A
7. B
8. B
9. D
10. D
11. B
12. A
13. B
14. B
15. A
16. B
17. 0.3
18. C
19. B
20. C
21. B
22. 20
23. A
24. B
25. 30

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