ARKANSAS GEOMETRY · UNIT 4 · 25 QUESTIONS

Data Analysis and Probability — 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 data set is 4, 7, 9, 12, 18. The mean is**

- A 9
- B 12
- C 7
- D 10

Understand It with Pulse | Flag a mistake

2 **The data set is 3, 8, 11, 14, 19, 23. The median is**

A 11

B 12.5

C 14

D 13

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3 **The data set is 5, 6, 6, 9, 11, 11, 11, 14. The mode is**

A 11

B 6

C 9

D 5

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4 **The data set is 12, 19, 24, 31, 45. The range is**

A 24

B 57

C 33

D 12

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5 **A fair coin is flipped twice The probability of two heads is**



A $\frac{1}{2}$

B $\frac{3}{4}$

C $\frac{1}{4}$

D 1

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6 A fair six sided die is rolled The probability of rolling a number greater than 4 is

- **A** $\frac{1}{6}$
- **B** $\frac{1}{2}$
- **C** $\frac{2}{3}$
- **D** $\frac{1}{3}$

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7 A bag has 3 red marbles and 7 blue marbles One marble is drawn at random The probability it is red is

- **A** $\frac{3}{10}$
- **B** $\frac{7}{10}$
- **C** $\frac{3}{7}$
- **D** $\frac{1}{3}$

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8 **A bag has 4 green balls and 6 yellow balls Two balls are drawn without replacement The probability both are green is**

- **A** $\frac{2}{15}$
- **B** $\frac{4}{25}$
- **C** $\frac{1}{5}$
- **D** $\frac{3}{10}$

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9 **Events A and B are independent The probability of A is 0.5 and the probability of B is 0.4. The probability of both A and B is**

- **A** 0.9
- **B** 0.1
- **C** 0.5
- **D** 0.2

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10 **The probability of rain is 0.3. The probability of no rain is**

A 0.3

B 0.7

C 1.3

D 0.03

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11 **A spinner has 8 equal sections numbered 1 through 8. The probability of spinning an even number is**



A $\frac{1}{8}$

B $\frac{3}{8}$

C $\frac{1}{2}$

D $\frac{5}{8}$

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12 Two fair dice are rolled The probability the sum is 7 is

- A $\frac{1}{6}$
- B $\frac{5}{36}$
- C $\frac{7}{36}$
- D $\frac{1}{12}$

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13 A class has 12 boys and 18 girls One student is chosen at random The probability the student is a girl is

- A $\frac{2}{5}$
- B $\frac{2}{3}$
- C $\frac{3}{5}$
- D $\frac{1}{3}$

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14 **The number of ways to arrange 5 different books in a row is**



A 25

B 120

C 20

D 60

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15 **A committee of 3 is chosen from 6 people The number of different committees is**

- A 18
- B 120
- C 6
- D 20

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16 **A password uses 2 different letters followed by 2 different digits Counting order, the number of choices for the first two letters is**

- A 26
- B 650
- C 676
- D 52

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17 **In a data set, the first quartile is 20 and the third quartile is 47. The interquartile range is**

- A 67
- B 33.5
- C 20
- D 27

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18 **A data set has mean 50 and standard deviation 5. A value of 60 is how many standard deviations above the mean?**

- A 10
- B 2
- C 5
- D 12

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19 **Out of 200 students, 80 play soccer and 50 play basketball If 30 play both, the number who play neither is**



A 100

B 130

C 70

D 30

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20 A survey asks 40 students if they like art If 28 say yes, the fraction who say yes is

- A $\frac{7}{10}$
- B $\frac{2}{5}$
- C $\frac{7}{20}$
- D $\frac{3}{4}$

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21 The expected value of rolling a fair six sided die is

- A 3
- B 4
- C 2.5
- D 3.5

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22 **A box plot shows a median of 30 and a maximum of 55. About half the data lie below**

A 55

B 30

C 15

D 42.5

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23 **If a data value is increased by 10, the mean of the data set**

A Stays the same

B Decreases

C Increases

D Becomes zero

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24 **A standard deck has 52 cards How many aces are in the deck?**



ANSWER

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

A 20

B 40

C 30

D 25

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ANSWER KEY

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

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