ARIZONA 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 mean of 4, 6, 8, 10, and 12 is**



A 8

B 10

C 6

D 40

Understand It with Pulse | Flag a mistake

2 **The median of 3, 7, 9, 12, and 15 is**

A 7

B 9

C 12

D 10

Understand It with Pulse | Flag a mistake

3 **The mode of 5, 7, 7, 9, and 11 is**

A 5

B 7

C 9

D 11

Understand It with Pulse | Flag a mistake

4 **The range of 12, 18, 25, and 31 is**

A 19

B 12

C 31

D 21

Understand It with Pulse | Flag a mistake

5 **The first quartile is 20 and the third quartile is 44. The interquartile range is**

A 24

B 64

C 22

D 20

Understand It with Pulse | Flag a mistake

6 **The standard deviation measures**

A the middle value

B the most common value

C spread around the mean

D the largest value

Understand It with Pulse | Flag a mistake

7 **In a box plot, the line inside the box shows the**

A mean

B median

C mode

D range

Understand It with Pulse | Flag a mistake

8 **As study time increases, test scores tend to increase This scatter plot shows a**

A positive correlation

B negative correlation

C no correlation

D perfect causation

Understand It with Pulse | Flag a mistake

9 **A correlation coefficient of 0.9 shows a**

A strong positive relationship

B weak positive relationship

C strong negative relationship

D no relationship

Understand It with Pulse | Flag a mistake

10 **A correlation coefficient of -0.85 shows a**

A strong positive relationship

B weak negative relationship

C strong negative relationship

D no relationship

Understand It with Pulse | Flag a mistake

11 The probability of rolling an even number on a fair die is



A $\frac{1}{6}$

B $\frac{1}{2}$

C $\frac{1}{3}$

D $\frac{2}{3}$

Understand It with Pulse | Flag a mistake

12 The probability of rolling a sum of 7 with two fair dice is

- **A** $\frac{1}{6}$
- **B** $\frac{1}{12}$
- **C** $\frac{7}{36}$
- **D** $\frac{1}{3}$

Understand It with Pulse | Flag a mistake

13 If P(A) = 0.2 and P(B) = 0.5 and the events are independent, then P(A and B) is

- **A** 0.7
- **B** 0.1
- **C** 0.3
- **D** 0.25

Understand It with Pulse | Flag a mistake

14 **The number of permutations of 2 chosen from 5 in order is**



A 10

B 20

C 25

D 7

Understand It with Pulse | Flag a mistake

15 **The number of combinations of 2 chosen from 6 is**

A 12

B 15

C 30

D 8

Understand It with Pulse | Flag a mistake

16 **In a normal distribution with mean 50 and standard deviation 10, a value 2 standard deviations above the mean is**



A 30

B 60

C 70

D 52

Understand It with Pulse | Flag a mistake

17 **In the same normal distribution, a value of 70 has a z score of**

A 1

B 2

C 7

D 20

Understand It with Pulse | Flag a mistake

18 **A survey that only asks volunteers who feel strongly is likely to be**



A unbiased

B biased

C random

D complete

Understand It with Pulse | Flag a mistake

19 **The best way to choose a fair sample of students is to**

- A pick names at random
- B ask only friends
- C ask only volunteers
- D ask the first five students

Understand It with Pulse | Flag a mistake

20 **A data set is skewed right when its tail points toward**

- A low values
- B high values
- C the middle
- D zero

Understand It with Pulse | Flag a mistake

21 **A single very high value will most likely raise the**



A mean more than the median

B median more than the mean

C mode only

D range to zero

Understand It with Pulse | Flag a mistake

22 The probability of an impossible event is

- A 1
- B 0
- C 0.5
- D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

23 The probability of an event plus the probability of its complement equals

- A 0
- B 0.5
- C 1
- D 2

Understand It with Pulse | Flag a mistake

24 **If the probability of rain is 0.25, the probability of no rain is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **25 percent of 80 students is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**10.**	C	**19.**	A
2.	B	**11.**	B	**20.**	B
3.	B	**12.**	A	**21.**	A
4.	A	**13.**	B	**22.**	B
5.	A	**14.**	B	**23.**	C
6.	C	**15.**	B	**24.**	0.75
7.	B	**16.**	C	**25.**	20
8.	A	**17.**	B		
9.	A	**18.**	B		

© 2026 Brett Robbins. All Rights Reserved.