

1. What does the correlation coefficient tell us?
 - (A) Measure of the exponential association between two variables
 - (B) Measure of the causation of one variable on the other
 - (C) Measure of the linear association between two variables
 - (D) Measure of the distance between a datum and the value predicted by a model

2. The correlation coefficient between two variables is 0.9. How would you describe this value?
 - (A) Strong and positive
 - (B) Strong and negative
 - (C) Weak and positive
 - (D) Weak and negative

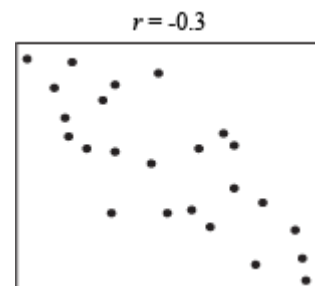
3. The correlation coefficient between two variables is -0.4. How would you describe this value?
 - (A) Strong and positive
 - (B) Strong and negative
 - (C) Weak and positive
 - (D) Weak and negative

4. We assume that SAT score is linearly associated with GPA and determine the correlation coefficient to be 0.8. What does this value suggest?
 - (A) SAT score decreases as GPA increases
 - (B) There is no relation between SAT score and GPA
 - (C) GPA increases as SAT decreases
 - (D) SAT score increases as GPA increases

5. Which of the following values for r suggests a strong negative correlation?
 - (A) -0.2
 - (B) 0.95
 - (C) -0.85
 - (D) 0

6. Which of the following is true about the data represented on the graph?

- (A) The correlation coefficient is greater than zero.
- (B) The data depicts a negative weak correlation.
- (C) The data depicts a negative strong correlation.
- (D) There is no substantial correlation between the data.

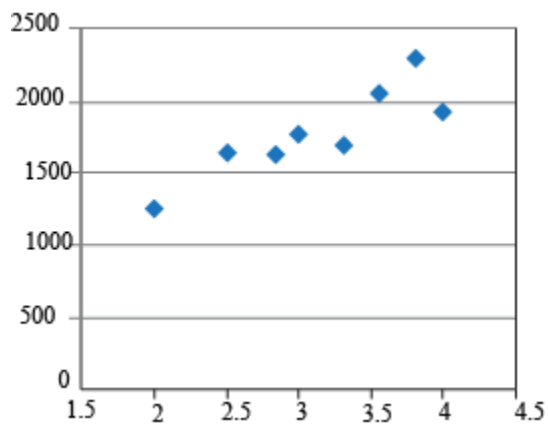


7. The following data presents the SAT score and GPA for 8 students. If we assume that SAT score is dependent on GPA, which variable is x and which is y?

SAT Score	GPA
1240	2
1650	2.5
1600	2.8
1800	3
1750	3.3
2100	3.5
2300	3.8
1980	4

- (A) GPA is both x and y
- (B) GPA is x, SAT score is y
- (C) SAT score is x, GPA is y
- (D) SAT score is both x and y

8. The following figure displays a graph showing GPA and SAT score. Based on the scatter plot, which of the following is the best assumption about the correlation between the variables?



- (A) Positive linear correlation
- (B) No correlation
- (C) Negative linear correlation
- (D) Exponential correlation

9. What is the correlation coefficient for the assumption that SAT score is dependent on GPA?

- (A) 0
- (B) -0.90
- (C) 0.20
- (D) 0.90