

## CORRELATION COEFFICIENT FORMULA

The correlation coefficient definition is a number between minus 1 and 1, telling you the direction and strength of the relationship between the variables. It helps you to reflect on how similar the measurement of two or more variables across a particular data set is. It helps you to define the linear correlation coefficient between the degree of relationship between two or more variables and the degrees denoted by 'r.' The primary example of using the correlation coefficient in day-to-day life is when calculating the performance of two stocks that move in a particular direction and are positive.







## Q1: Which value indicates a perfect negative correlation in the Pearson correlation coefficient (r)?

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

# Q2: What type of correlation is represented by a correlation coefficient of -0.2?

- A: Strong positive correlation
- B: Weak positive correlation
- C: Strong negative correlation
- D: Weak negative correlation

## Q3: What does a correlation coefficient of 1 indicate?

- A: Strong positive correlation
- **B: No correlation**
- C: Causation
- D: Strong negative correlation

## Q4: What is the correlation coefficient with 'p'?

- A: Simple Correlation Formula
- **B:** Complex Correlation Formula
- **C: Population Correlation Formula**
- D: None of these

## Q5: What is the correlation coefficient with 'r'?

- A: Simple Correlation Formula
- **B:** Complex Correlation Formula
- C: Population Correlation Formula
- D: None of these



## **Q6: Identify the type of Correlation Coefficient Formula**

- A: Pearson Correlation Coefficient
- B: Kendall's Tau Correlation Coefficient
- C: Spearman Rank Correlation Coefficient
- D: All of these

## Q7: What does a correlation coefficient of 0 indicate?

- A: Strong positive correlation
- **B: No correlation**
- C: Causation
- D: Strong negative correlation

#### Q8: What is the range of the correlation coefficient?

A: 0 to 1 B: 1 to 2 C: -1 to 1 D: 2 to 3

## Q9: What type of correlation is represented by a correlation coefficient of -1?

- A: Strong positive correlation
- B: Weak positive correlation
- C: Strong negative correlation
- D: Weak negative correlation

# Q10: What type of correlation is represented by a correlation coefficient of 0.2?

- A: Strong positive correlation
- B: Weak positive correlation
- C: Strong negative correlation
- D: Weak negative correlation





### Answers

- **Q1:** B -1
- Q2: D Weak negative correlation
- Q3: A Strong positive correlation
- Q4: C Population Correlation Formula
- Q5: A Simple Correlation Formula
- Q6: D All of these
- Q7: B No correlation
- **Q8:** C -1 to 1
- Q9: C Strong negative correlation
- Q10: B Weak positive correlation