

# [Example of essay on statistics](https://assignbuster.com/example-of-essay-on-statistics/)

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## Question 1

This is a descriptive statistics. The teacher is simply collecting and summarizing the data into a descriptive form. The teacher does not make any predictions or inferences. She simply collects data and would need a numerical solution.

## Question 2

Inferential statistics is used in this study to analyze the stimuli. Descriptive statistics would be used in the calculation of different measures such as averages, standard deviation, among others. These measures are necessary for comparison. Therefore, both inferential and descriptive statistics would be important in the study.

## Question 3

The data of marks scored was arranged in ascending order. 80th percentile implies that the marks I scored fell within the marks scored by 80% of the total participants. It is not possible to determine actual marks.

## Question 4

Subjects are not randomly sampled from some specified population-relates to the generality of the results because we can only draw proper conclusion about a specific population and not the general population. Subjects are not randomly assigned to conditions-relates to validity of the results because we are likely to get a predetermined result. The problem relating to generality is more serious than that relating to validity. In the case of validity, we can make a conclusion although the results may be predetermined. In the case of generality, it is impossible to draw any conclusion.

## Question 5

In a study to assess the impact of IQ on performance, IQ is the independent variable while performance is the dependent variable.

## Question 6

Rating of the quality of a movie on a 7-point scale- quantitative   
Age-quantitative   
Country you were born in- qualitative   
Favorite Color-qualitative   
Time to respond to a question-quantitative   
Question 7   
Rating of the quality of a movie on a 7-point scale-scale   
Country you were born in- nominal. You can only name the country but cannot categorize the response.

## Age-scale

Favorite Color-nominal   
Time to respond to a question - scale. It is possible to arrange time taken to respond into different levels.

## Question 8

Converting from meters to kilometers – linear transformation   
Converting from ounces to pounds - linear transformation   
Multiplying all numbers by 2 and then adding 5 - linear transformation   
Converting temperature from Fahrenheit to Centigrade - linear transformation   
Question 9   
It is a linear transformation. His or her grade g = 16 + 3\*20= 76

## Question 10

EX = (1+2+4+16)/4= 23/4= 5. 75   
EX2 = (12+22+42+162)/4= 69. 25   
(EX)2= 5. 752 = 33. 065

## Question 12

Time to solve an anagram problem (where the letters of a word or phrase are rearranged into another word or phrase like “ dear” and “ read” or “ funeral” and “ real fun”) is likely to have a skewed distribution than scores from a vocabulary test.

## Question 13

The participant variables are Gender and Sports.   
Question 14   
The dependent variables are Expression, Anger in, Anger out, Control out and Control in. TheS are altered to assess their impact of the above participant variables.

## Question 15

Anger is a qualitative variable because it is very difficult to find its numeric value.   
Question 16   
The dependent variable is condition.   
Question 17   
The independent variable is dosage and it has three levels.   
Question 18   
The dependent variable is dO-the number of correct responses after taking a placebo. The variable was measured on the nominal scale. You can only name or categorize the number of correct responses after taking a placebo. The data cannot be arranged into any levels.