

# Example of essay on statistics

[Sociology](#), [Population](#)



### **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  $g = 16 + 3 \cdot 20 = 76$

### **Question 10**

$$EX = (1+2+4+16)/4 = 23/4 = 5.75$$

$$EX^2 = (1^2+2^2+4^2+16^2)/4 = 69.25$$

$$(EX)^2 = 5.75^2 = 33.0625$$

### **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. These 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.