

First Homework for Introduction to Probability and Statistics (101 Stat)

1) **Classify each variable as discrete or continuous and as qualitative or quantitative.**

- a) The variable that recording the types of trees in the world
- b) The variable that recording color of flowers in gardens
- c) The variable that recording the lifetime of lamps of a specific brand
- d) The variable that recording types of cars in the forest markets in Riyadh
- e) The variable that recording numbers of busses in Qaseem
- f) The variable that recording colors of the spectrum of rainbow
- g) The variable that measures the heights of people
- h) The variable that measures the temperature inside classrooms in KSU

2) **Give two examples for each of the following (It is not permissible to use the phrases that were written in the previous application):**

- a) Discrete quantitative variable
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- b) Continuous quantitative variable
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- c) Discrete qualitative variable
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- d) Continuous qualitative variable
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4) Forty students were asked about their blood types (or blood groups). The results were found as follows:

A	A	B	AB	A	B	O	O	O	B
A	B	B	B	O	O	AB	AB	A	A
B	B	B	AB	B	A	A	A	O	O
B	AB	O	AB	B	AB	A	A	O	A

a) Construct a **frequency** table for this data

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b) Draw the **bar chart** for the given data

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c) Draw the **pie chart** for the given data

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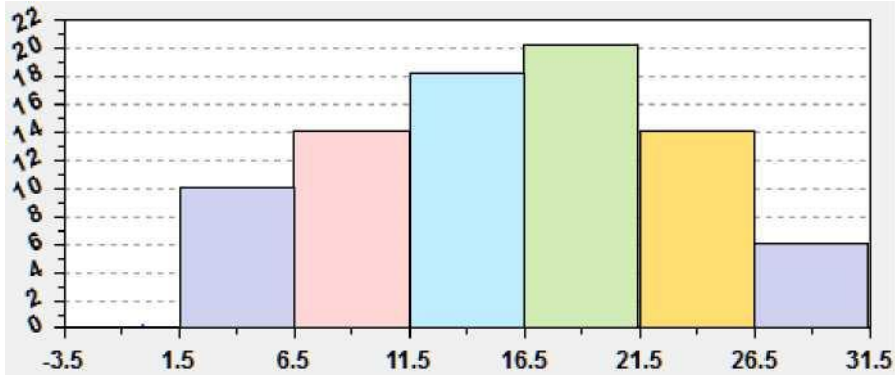
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5) Consider the following histogram of grouped data:



a) Prepare the **frequency distribution table** for the given data

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b) Calculate the **mean, median** and **mode(s)** for the given data

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c) Calculate the **standard deviation** for the given data

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