**edX**

**UTAustinX:** UT.7.10x Foundations of Data Analysis - Part 1

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# Question 3

Here is a list of ten data values that are **sorted from smallest to largest**, but five of the data values are missing. The missing values are represented by A, B, C, D, and E.

2   **A**   3   **B**   6   **C**   9   **D**   15   **E**

Using the statistics below, find the missing values for the data set.

Mean = 8     Median = 6.5     Mode = 2     Range = 16     IQR = 10

*Hint: You should not start by using the mean; save that for the end.*

---

(7/7 points)

3a.

A =

2     ✔ **Answer: 2**
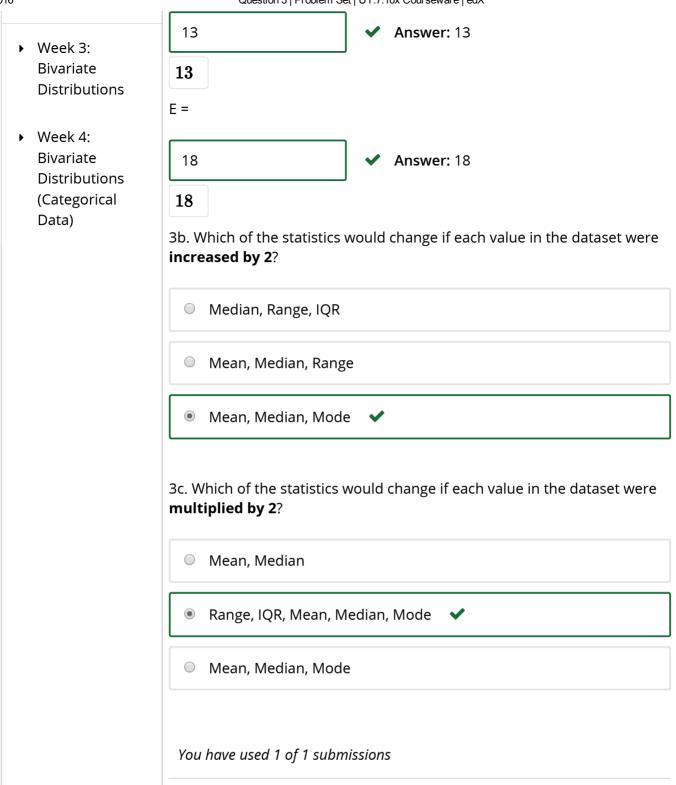
**2**

B =

5     ✔ **Answer: 5**

**5**

C =

7     ✔ **Answer: 7**

**7**

D =

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| 13 | ✔ **Answer:** 13 |

**13**

E =

| 18 | ✔ **Answer:** 18 |

**18**

**3b.** Which of the statistics would change if each value in the dataset were **increased by 2**?

- ○  Median, Range, IQR

- ○  Mean, Median, Range

- ◉  Mean, Median, Mode  ✔

**3c.** Which of the statistics would change if each value in the dataset were **multiplied by 2**?

- ○  Mean, Median

- ◉  Range, IQR, Mean, Median, Mode  ✔

- ○  Mean, Median, Mode

*You have used 1 of 1 submissions*

▸ Week 4:
  Bivariate
  Distributions
  (Categorical
  Data)