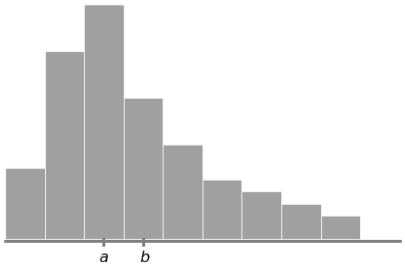
1. (3 pts) Which of the following statements is true about the data represented by the histogram below?




- (●) **b** is the mean and **a** is the median
- ( ) **a** is the mean and **b** is the median
- ( ) **a** is the mean and **b** is the mode
- ( ) **a** and **b** are both technically the mean

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2. You are given a Pandas DataFrame `cereal` with **information per serving about** 80 **different breakfast cereals**. Here are the first 5 rows of the DataFrame:

| | name | manufacturer | type | calories | protein | fat | fiber | carbo | sugars |
|---|---|---|---|---|---|---|---|---|---|
| **0** | 100% Bran | Nabisco | cold | 70 | 4 | 1 | 10.03 | 5.0 | 6 |
| **1** | 100% Natural Bran | Quaker Oats | cold | 120 | 3 | 5 | 1.93 | 8.0 | 8 |
| **2** | All-Bran | Kelloggs | cold | 70 | 4 | 1 | 8.80 | 7.0 | 5 |
| **3** | All-Bran with Extra Fiber | Kelloggs | cold | 50 | 4 | 0 | 14.04 | 8.0 | 0 |
| **4** | Almond Delight | Ralston Purina | cold | 110 | 2 | 2 | 1.00 | 14.0 | 8 |

(a) (3 pts) What is the granularity of the cereal DataFrame?

- (●) serving of cereal
- ( ) manufacturer
- ( ) type of cereal
- ( ) box of cereal

(b) (6 pts) Identify the type for each of the following variables:

`fiber`

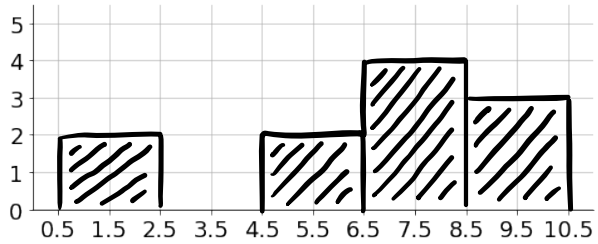
- ( ) Quantitative Discrete
- (●) Quantitative Continuous
- ( ) Qualitative Ordinal
- ( ) Qualitative Nominal

`manufacturer`

- ( ) Quantitative Discrete
- ( ) Quantitative Continuous
- ( ) Qualitative Ordinal
- (●) Qualitative Nominal

3. Consider the following data: {1, 2, 5, 6, 7, 8, 8, 8, 9, 10, 10}

(a) (5 pts) Using the axes below and bin edges at 0.5, 2.5, 4.5, 6.5, 8.5 and 10.5, draw a frequency histogram for the data.




(b) (3 pts) Which of the following best describes the skew of the data?

- ( ) Positively (right) skewed
- (●) Negatively (left) skewed
- ( ) Symmetric

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END OF QUIZ