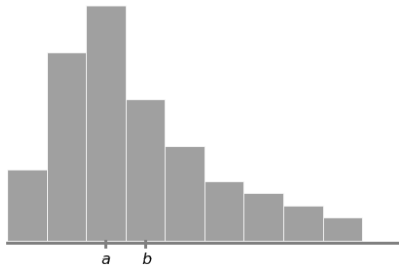


1. (3 pts) Which of the following statements is true about the data represented by the histogram below?



- ☐ **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

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**

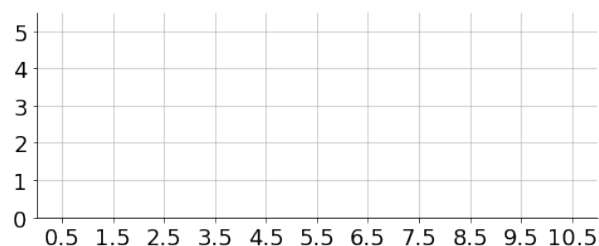
- ☐ Quantitative Discrete      ☐ Qualitative Ordinal  
☐ Quantitative Continuous      ☐ Qualitative Nominal

**manufacturer**

- ☐ Quantitative Discrete      ☐ Qualitative Ordinal  
☐ Quantitative Continuous      ☐ 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.



- ☐ Positively (right) skewed  
☐ Negatively (left) skewed  
☐ Symmetric
- (b) (3 pts) Which of the following best describes the skew of the data?

END OF QUIZ