assignment #1

1. In a statistics class with 136 students, the professor records how much money each student has in their possession during the first class of the semester. The histogram shown below represents the data he collected:

![Histogram](image)

Which of the following description(s) is/are correct regarding the shape of the histogram?

- A. Skewed right
- B. Skewed left
- C. Symmetric
- D. An outlier is present.
- E. Unimodal
- F. Bimodal

**Answer:** A

2. A consumer agency is testing appliances for a series of articles in their magazine. Currently they are working with cooktops and ranges. They have selected 16 of the most commonly used models. Using a series of tests, the agency will estimate the lifetime of these models. A histogram of these (estimated) lifetimes is shown below:
What is the proportion of these appliances that is estimated to last longer than 15 years?

A. More than half.
B. Less than half.
C. Equal to $4/16 = 0.25$.
D. Unable to determine from this graph.

Answer: D

The Environmental Protection Agency records data on the fuel economy of many different makes of cars.

Data on the mileage of 20 randomly selected cars are listed below. The values are ordered for convenience.

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What is the median mileage for these 20 cars?

A. 17.5 miles per gallon
B. 19 miles per gallon
C. 19.5 miles per gallon
D. 20 miles per gallon

Answer: C
What is the interquartile range for the mileage data?

A. 8.5 miles per gallon  
B. 16.5 miles per gallon  
C. 17 miles per gallon  
D. 25 miles per gallon

Answer: A