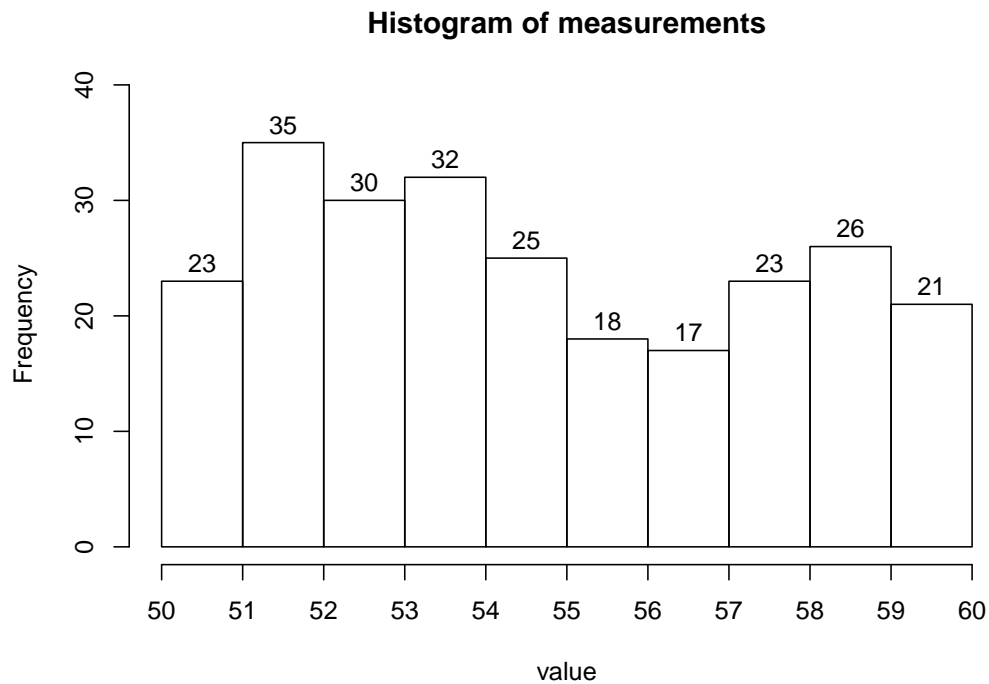


1. Problem

A continuous random variable was measured 250 times. The histogram is shown below.



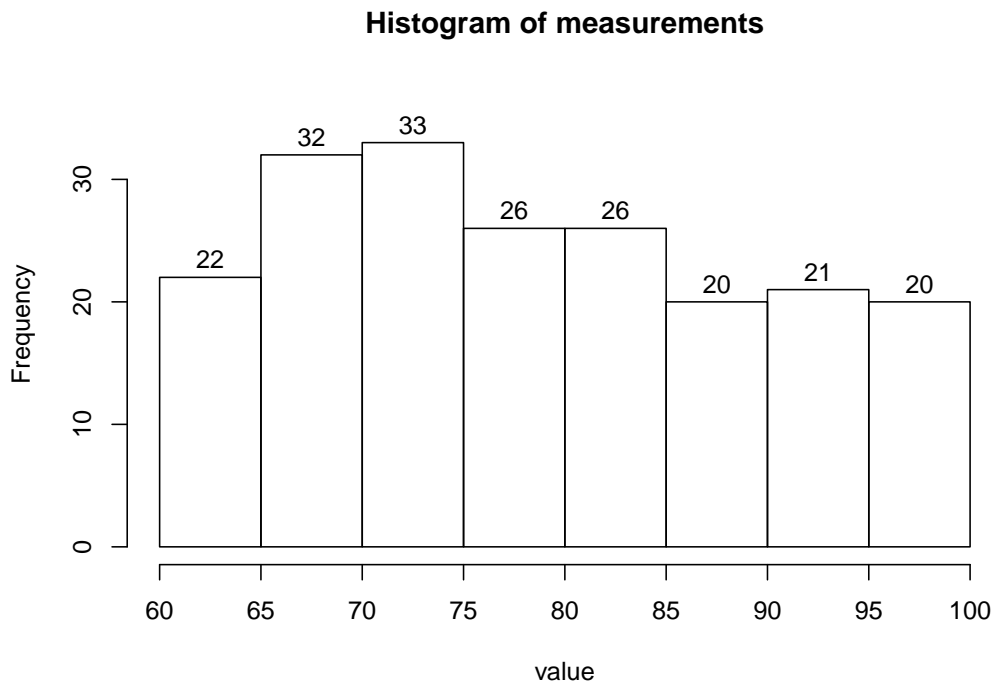
- (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
- (b) Estimate the range of the distribution (range = max-min).
- (c) What percent of the measurements are less than 52?
- (d) What percent of the measurements are less than 50?
- (e) Of the measurements less than 52, what percent are less than 50?
- (f) Estimate the value of the 48th percentile.

Solution

- (a) uniform
- (b) 10
- (c) 23.2%
- (d) 9.2%
- (e) 39.66%
- (f) 54

2. Problem

A continuous random variable was measured 200 times. The histogram is shown below.



- (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
- (b) Estimate the range of the distribution (range = max-min).
- (c) What percent of the measurements are less than 85?
- (d) What percent of the measurements are less than 80?
- (e) Of the measurements less than 85, what percent are less than 80?
- (f) Estimate the value of the 11th percentile.

Solution

- (a) uniform
- (b) 40
- (c) 69.5%
- (d) 56.5%
- (e) 81.29%
- (f) 65