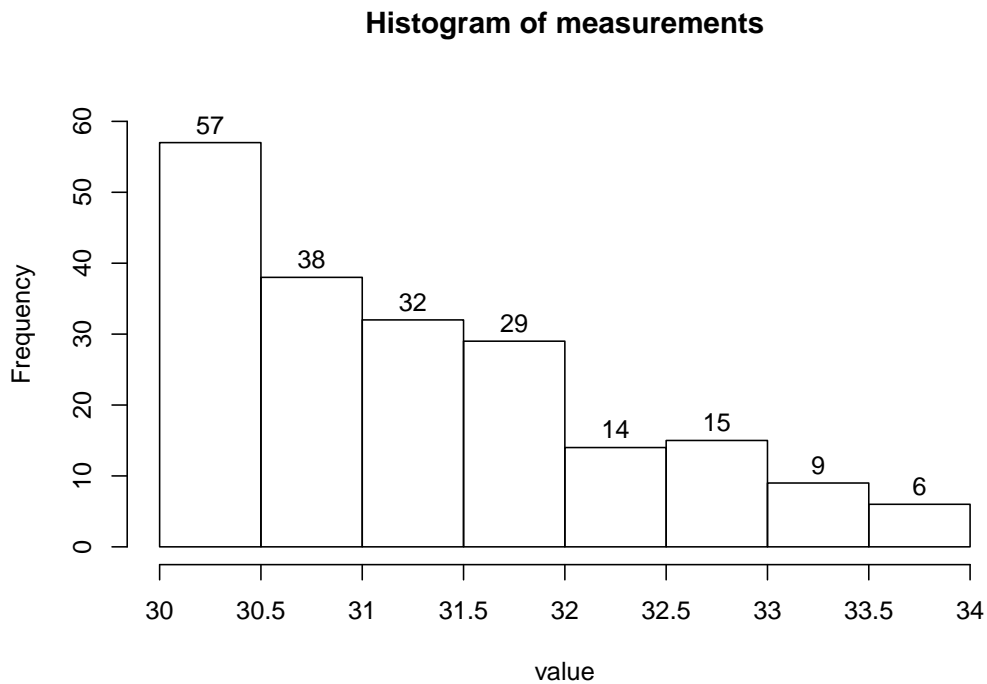


1. Problem

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



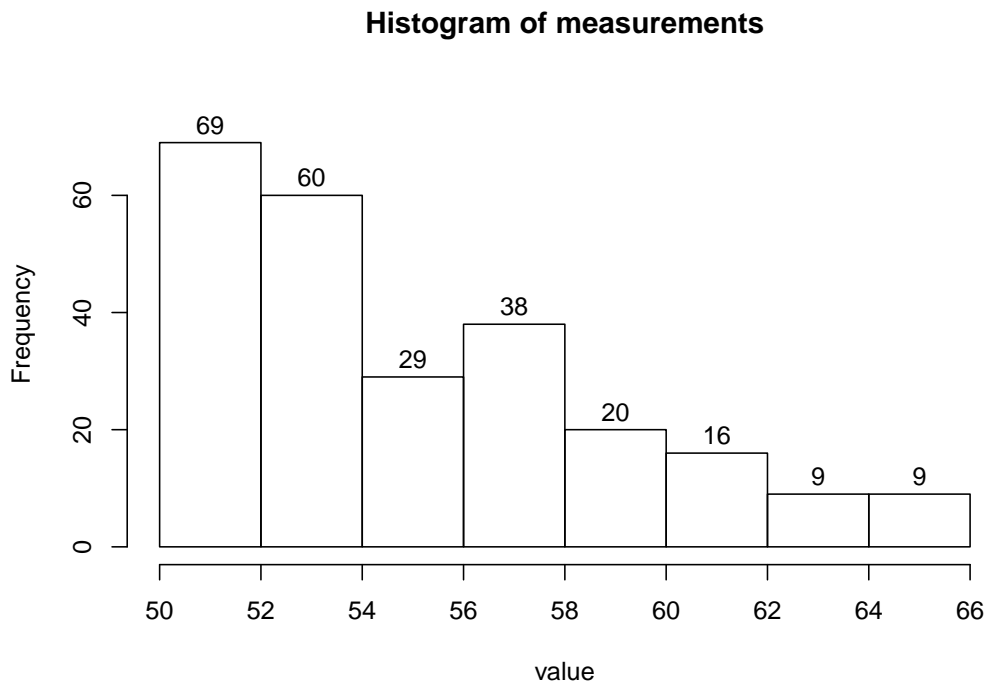
- (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
- (b) Estimate the range of the distribution (range = max-min).
- (c) What percent of the measurements are greater than 31.5?
- (d) What percent of the measurements are greater than 32.5?
- (e) Of the measurements greater than 31.5, what percent are greater than 32.5?
- (f) Estimate the value of the 47.5th percentile.

Solution

- (a) skew right
- (b) 4
- (c) 36.5%
- (d) 15%
- (e) 41.1%
- (f) 31

2. 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 60?
- (d) What percent of the measurements are greater than 52?
- (e) Of the measurements less than 60, what percent are greater than 52?
- (f) Estimate the value of the 92.8th percentile.

Solution

- (a) skew right
- (b) 16
- (c) 86.4%
- (d) 72.4%
- (e) 68.06%
- (f) 62