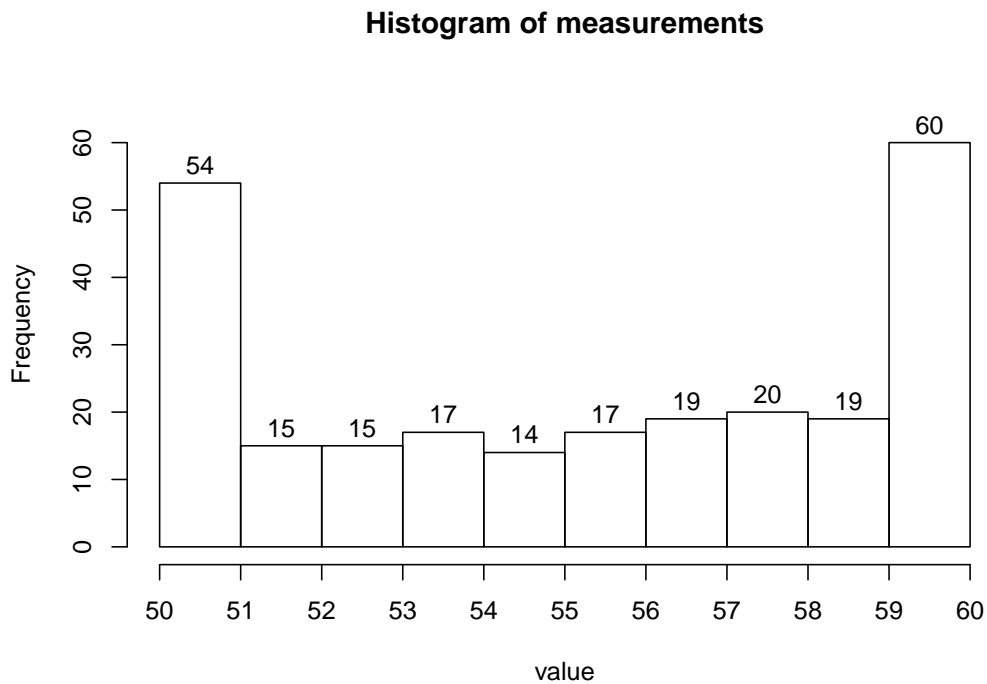


1. Problem

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



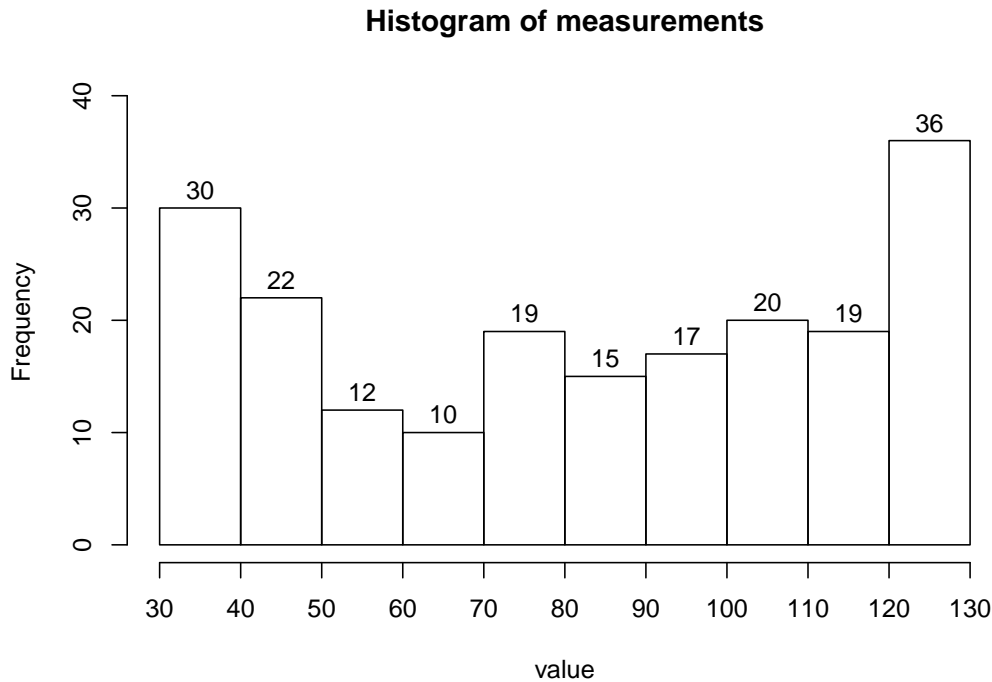
- (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
- (b) Estimate the range of the distribution (range = max-min).
- (c) What percent of the measurements are less than 55?
- (d) What percent of the measurements are less than 54?
- (e) Of the measurements less than 55, what percent are less than 54?
- (f) Estimate the value of the 27.6th percentile.

Solution

- (a) bimodal
- (b) 10
- (c) 46%
- (d) 40.4%
- (e) 87.83%
- (f) 52

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 80?
- (d) What percent of the measurements are less than 70?
- (e) Of the measurements less than 80, what percent are less than 70?
- (f) Estimate the value of the 72.5th percentile.

Solution

- (a) bimodal
- (b) 100
- (c) 46.5%
- (d) 37%
- (e) 79.57%
- (f) 110