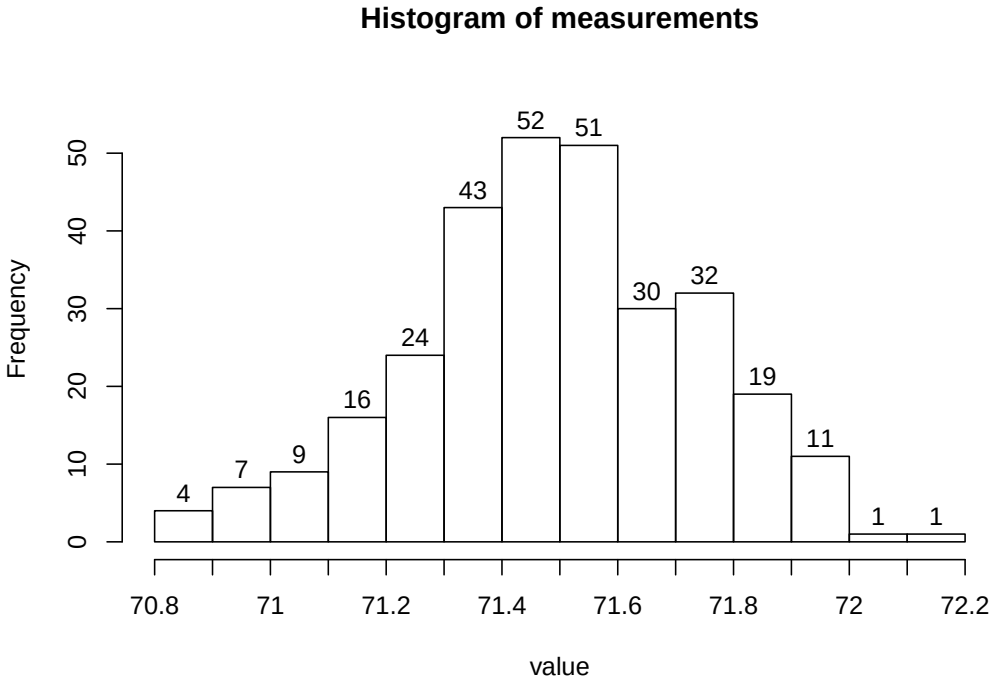
1. **Problem**
   A continuous random variable was measured 300 times. The histogram is shown below.

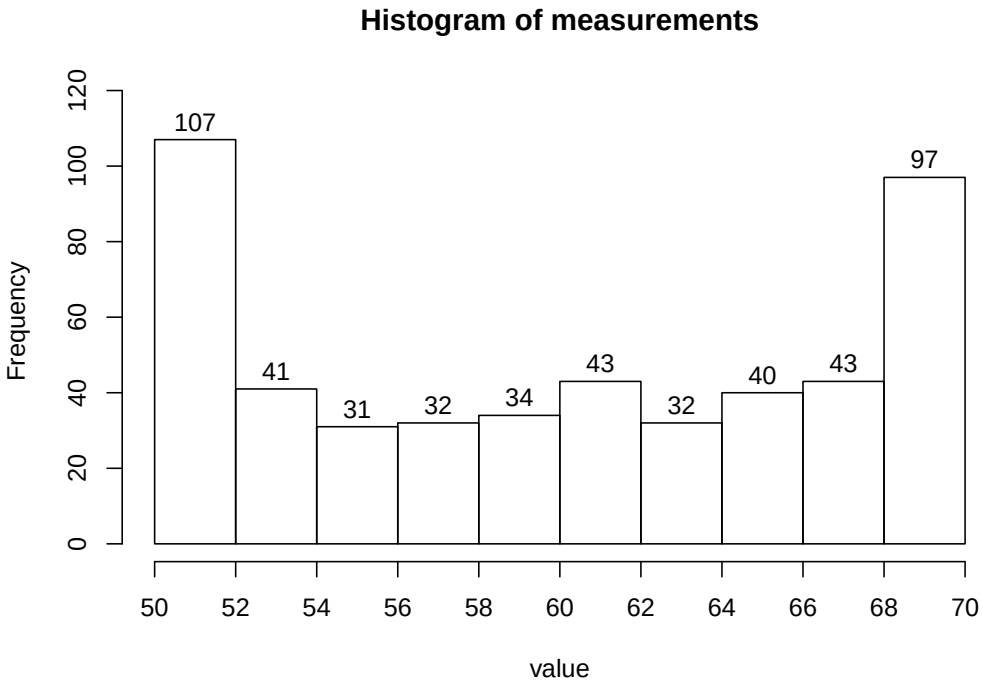


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 71.2?
   (d) What percent of the measurements are greater than 71.7?
   (e) Of the measurements greater than 71.2, what percent are greater than 71.7?
   (f) Estimate the value of the 99.33th percentile.

Solution

   (a) symmetric mound
   (b) 1.4
   (c) 88%
   (d) 21.33%
   (e) 24.24%
   (f) 72

2. **Problem**
A continuous random variable was measured 500 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 58?

(d) What percent of the measurements are greater than 64?

(e) Of the measurements greater than 58, what percent are greater than 64?

(f) Estimate the value of the 49th percentile.

Solution

(a) bimodal

(b) 20

(c) 57.8%

(d) 36%

(e) 62.28%

(f) 60