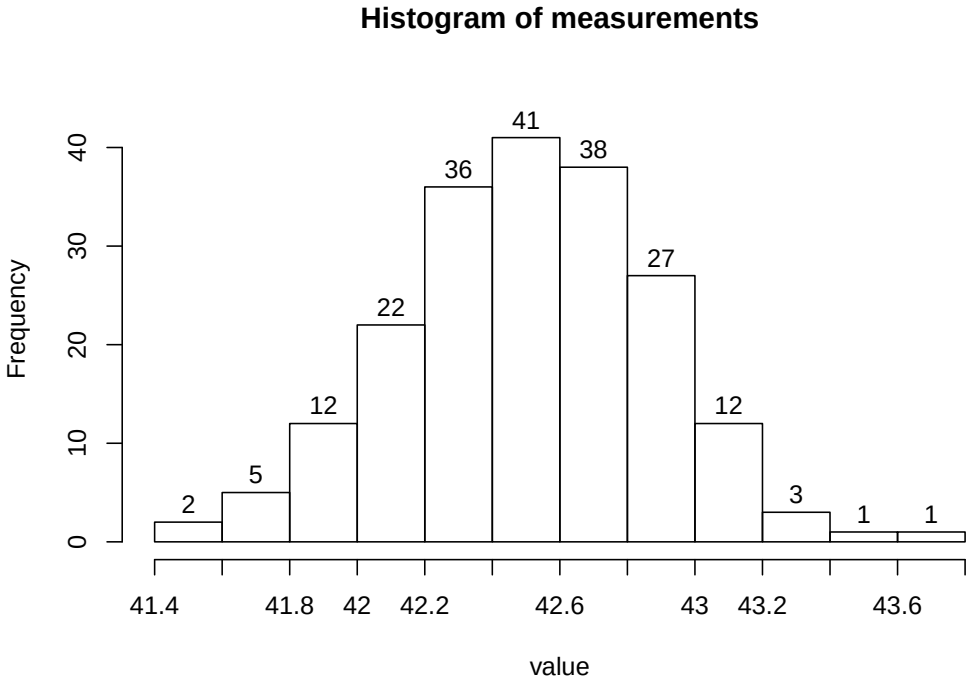
1. **Problem**
   A continuous random variable was measured 200 times. The histogram is shown below.

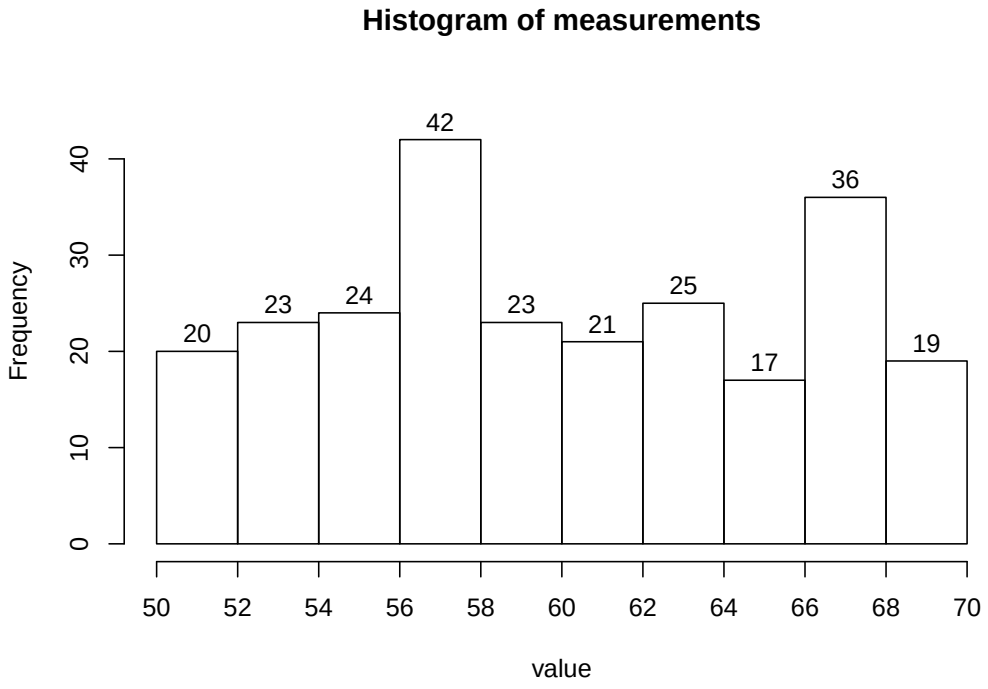


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 43?
   (d) What percent of the measurements are less than 43.6?
   (e) Of the measurements greater than 43, what percent are less than 43.6?
   (f) Estimate the value of the 20.5th percentile.

Solution

   (a) symmetric mound
   (b) 2.4
   (c) 8.5%
   (d) 99.5%
   (e) 94.12%
   (f) 42.2

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 64?

(d) What percent of the measurements are less than 62?

(e) Of the measurements less than 64, what percent are less than 62?

(f) Estimate the value of the 52.8th percentile.

Solution

(a) uniform

(b) 20

(c) 71.2%

(d) 61.2%

(e) 85.96%

(f) 60