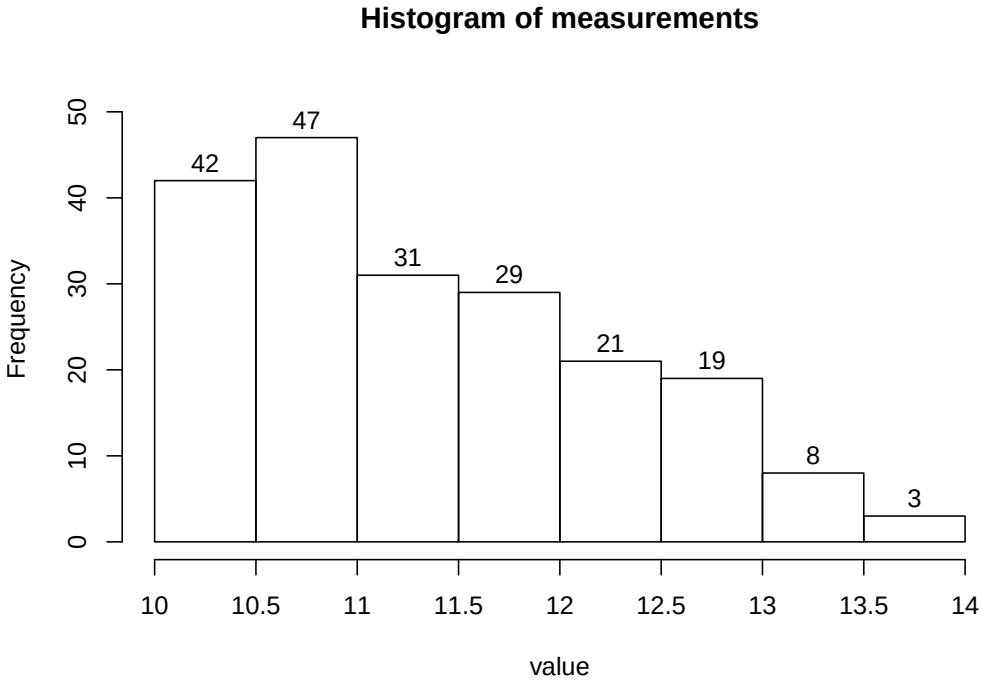
1. **Problem**
   A continuous random variable was measured 200 times. The histogram is shown below.

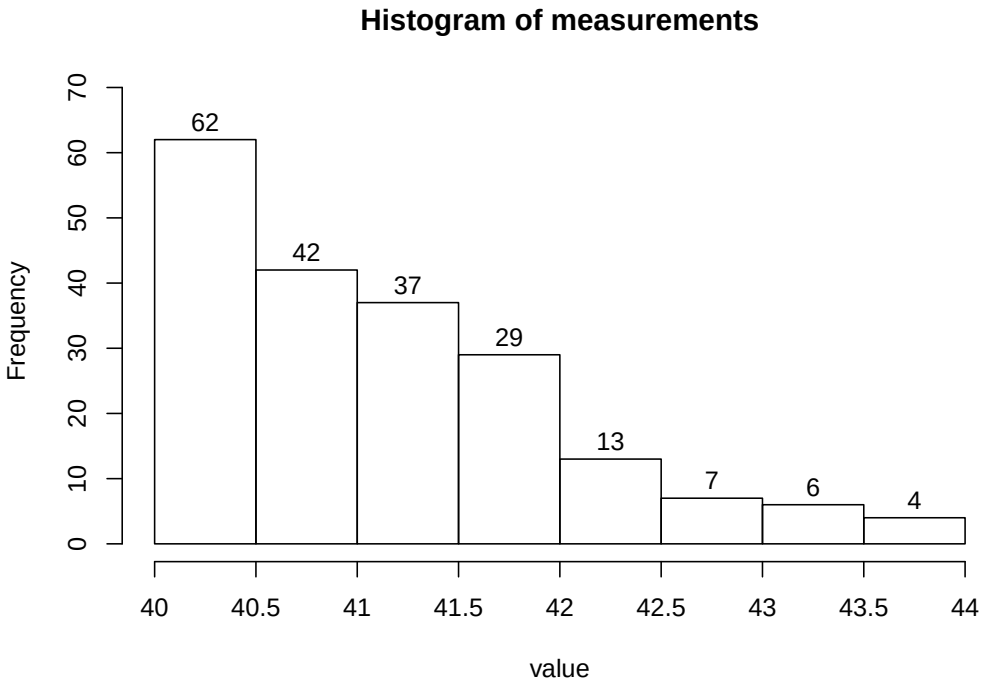


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 12?
   (d) What percent of the measurements are less than 13.5?
   (e) Of the measurements greater than 12, what percent are less than 13.5?
   (f) Estimate the value of the 60th percentile.

Solution

   (a) skew right
   (b) 4
   (c) 25.5%
   (d) 98.5%
   (e) 94.12%
   (f) 11.5

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 41?

(d) What percent of the measurements are greater than 40.5?

(e) Of the measurements less than 41, what percent are greater than 40.5?

(f) Estimate the value of the 70.5th percentile.

Solution

(a) skew right

(b) 4

(c) 52%

(d) 69%

(e) 40.38%

(f) 41.5