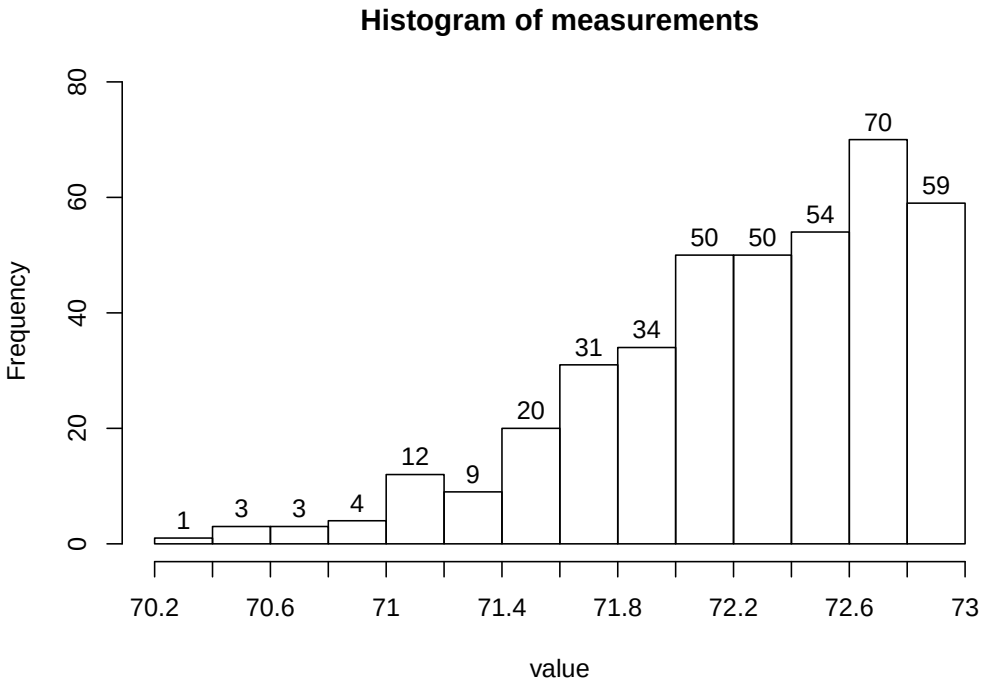
1. **Problem**
   A continuous random variable was measured 400 times. The histogram is shown below.

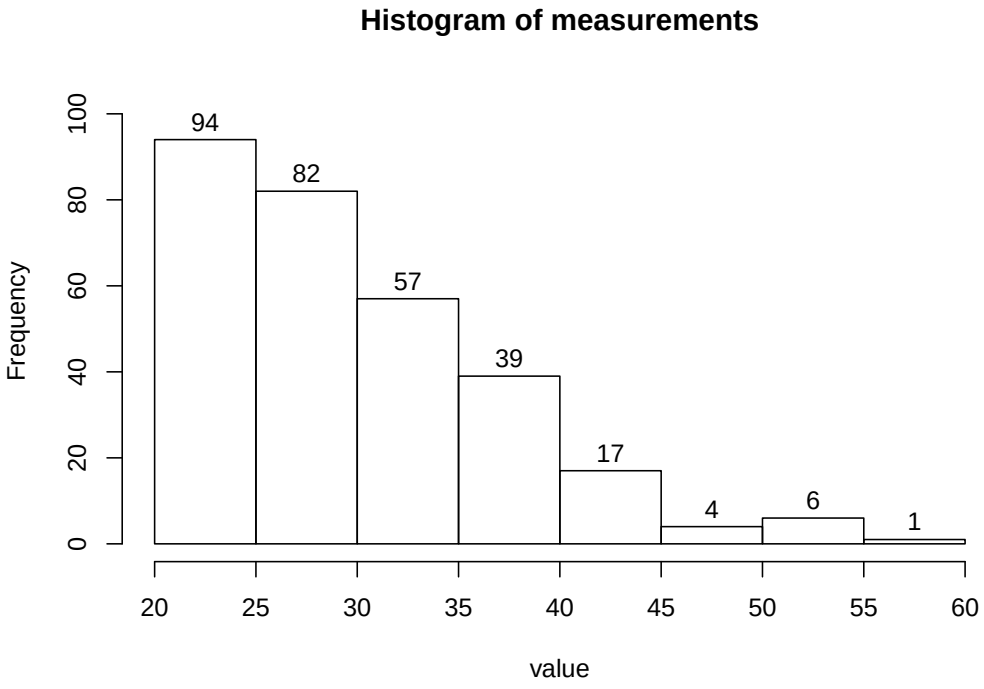


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 72.2?
   (d) What percent of the measurements are greater than 72?
   (e) Of the measurements less than 72.2, what percent are greater than 72?
   (f) Estimate the value of the 67.75th percentile.

Solution

   (a) skew left
   (b) 2.8
   (c) 41.75%
   (d) 70.75%
   (e) 29.94%
   (f) 72.6

2. **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 30?

(d) What percent of the measurements are less than 55?

(e) Of the measurements greater than 30, what percent are less than 55?

(f) Estimate the value of the 96.33th percentile.

Solution

(a) skew right

(b) 40

(c) 41.33%

(d) 99.67%

(e) 99.19%

(f) 45