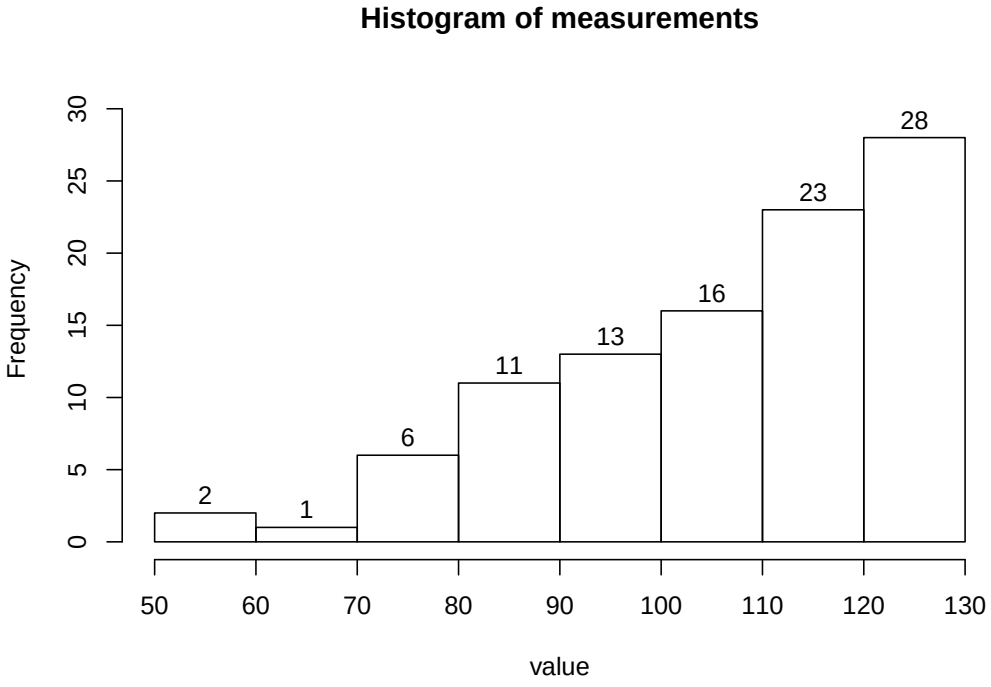
1. **Problem**
   A continuous random variable was measured 100 times. The histogram is shown below.

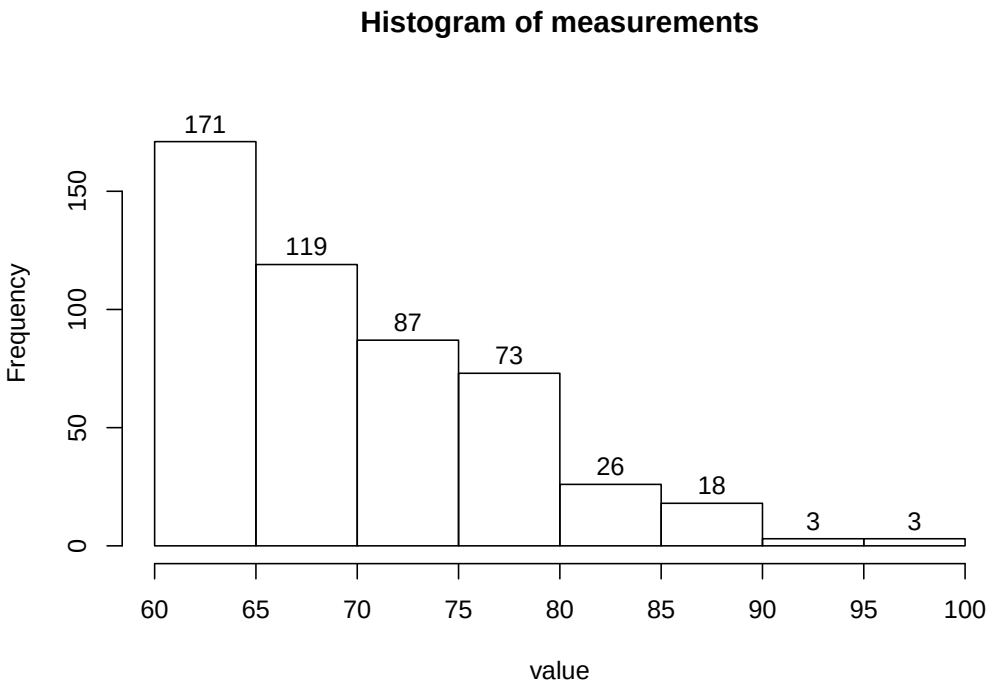


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 70?
   (d) What percent of the measurements are less than 90?
   (e) Of the measurements greater than 70, what percent are less than 90?
   (f) Estimate the value of the 49th percentile.

Solution

   (a) skew left
   (b) 80
   (c) 97%
   (d) 20%
   (e) 17.53%
   (f) 110

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 less than 70?

(d) What percent of the measurements are greater than 65?

(e) Of the measurements less than 70, what percent are greater than 65?

(f) Estimate the value of the 95.2th percentile.

Solution

(a) skew right

(b) 40

(c) 58%

(d) 65.8%

(e) 41.03%

(f) 85