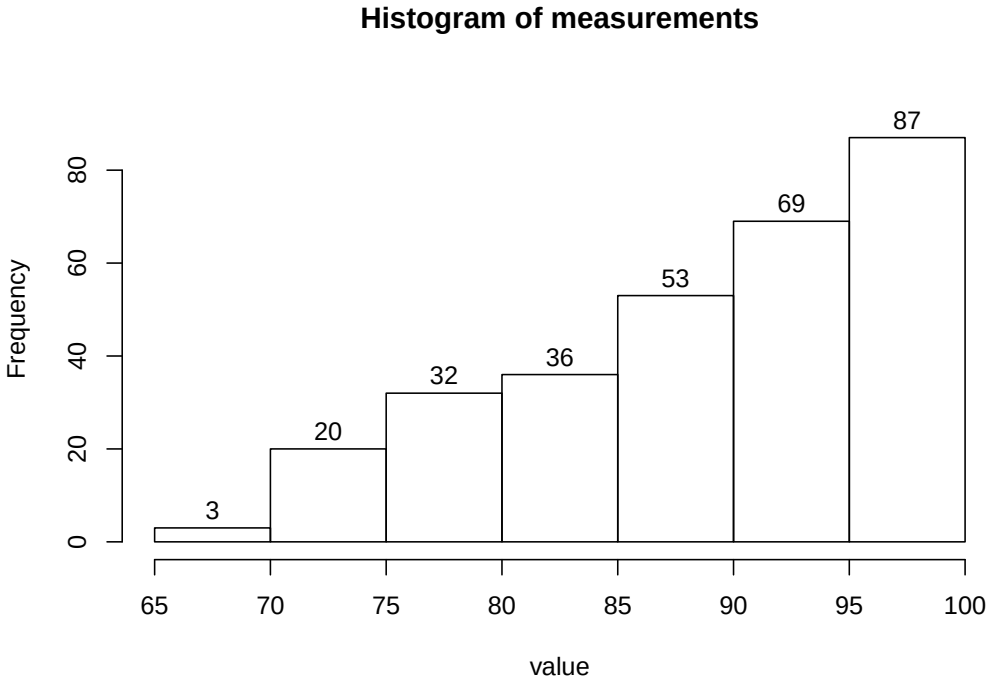
1. **Problem**
   A continuous random variable was measured 300 times. The histogram is shown below.

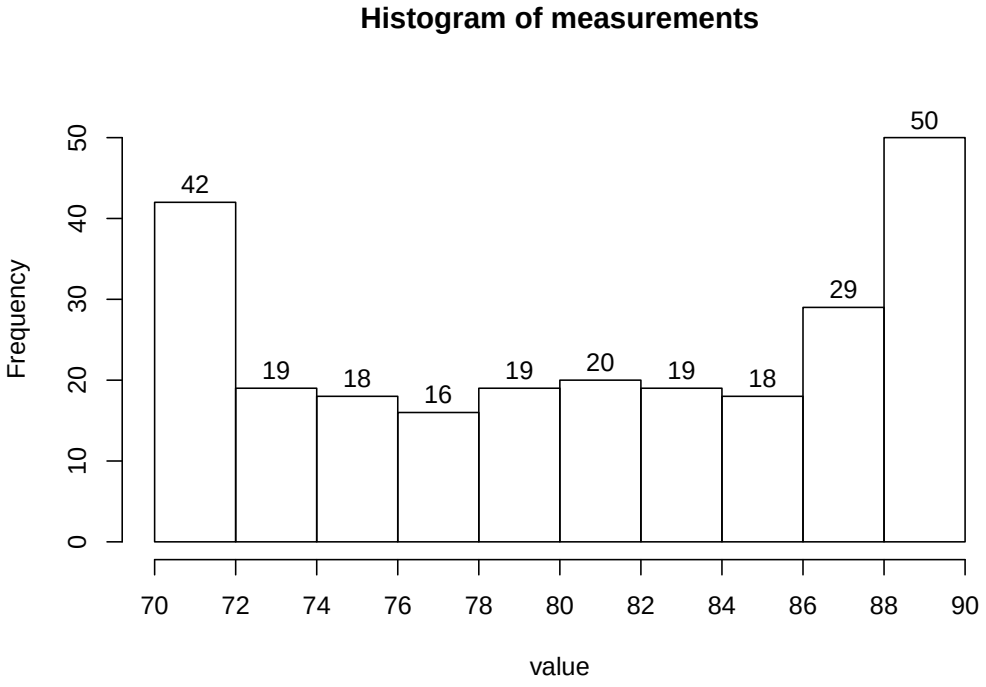


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 75?
   (d) What percent of the measurements are less than 65?
   (e) Of the measurements less than 75, what percent are less than 65?
   (f) Estimate the value of the 30.33th percentile.

Solution

   (a) skew left
   (b) 35
   (c) 7.667%
   (d) 1%
   (e) 13.04%
   (f) 85

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 greater than 76?

(d) What percent of the measurements are less than 84?

(e) Of the measurements greater than 76, what percent are less than 84?

(f) Estimate the value of the 68.4th percentile.

Solution

(a) bimodal

(b) 20

(c) 68.4%

(d) 61.2%

(e) 43.27%

(f) 86