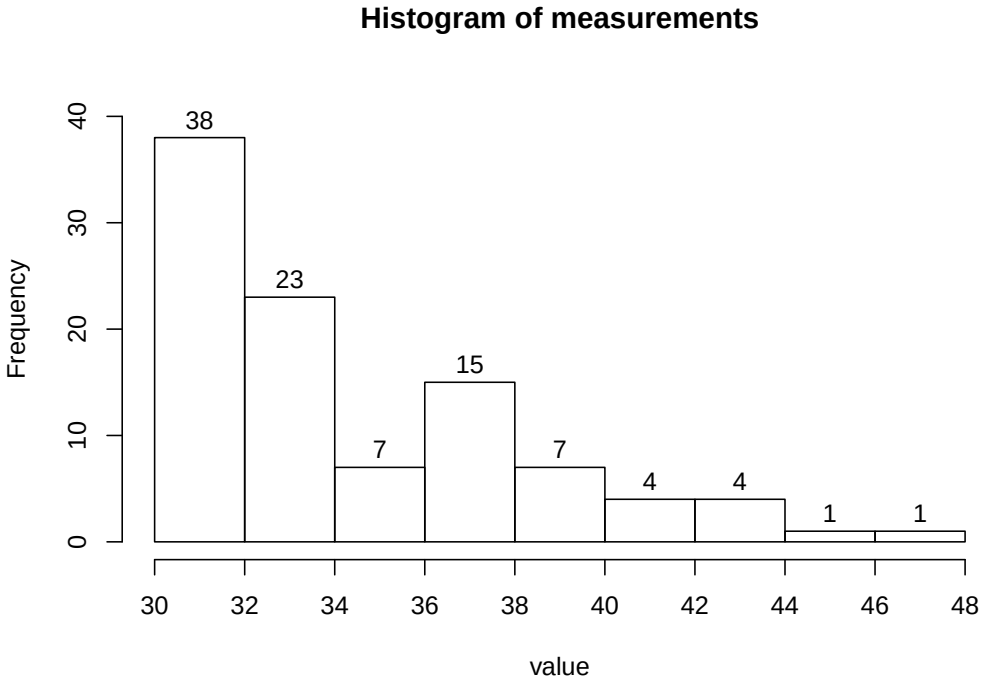
1. **Problem**
   A continuous random variable was measured 100 times. The histogram is shown below.

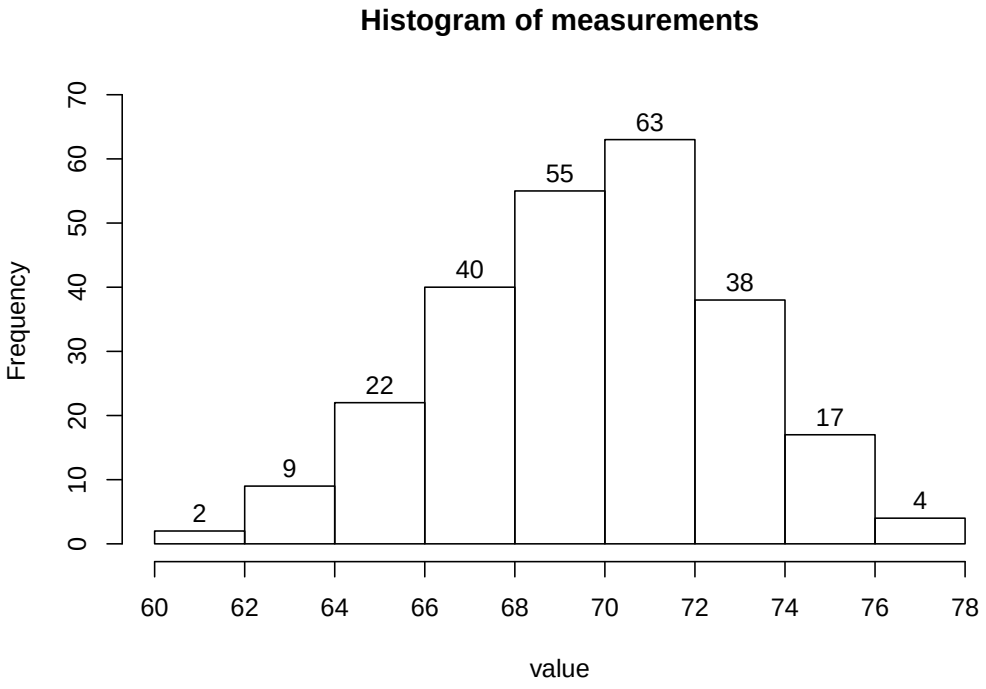


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 34?
   (d) What percent of the measurements are greater than 32?
   (e) Of the measurements less than 34, what percent are greater than 32?
   (f) Estimate the value of the 90th percentile.

Solution

   (a) skew right
   (b) 18
   (c) 61%
   (d) 62%
   (e) 37.7%
   (f) 40

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 68?

(d) What percent of the measurements are less than 70?

(e) Of the measurements greater than 68, what percent are less than 70?

(f) Estimate the value of the 0.8th percentile.

Solution

(a) symmetric mound

(b) 18

(c) 70.8%

(d) 51.2%

(e) 31.07%

(f) 62