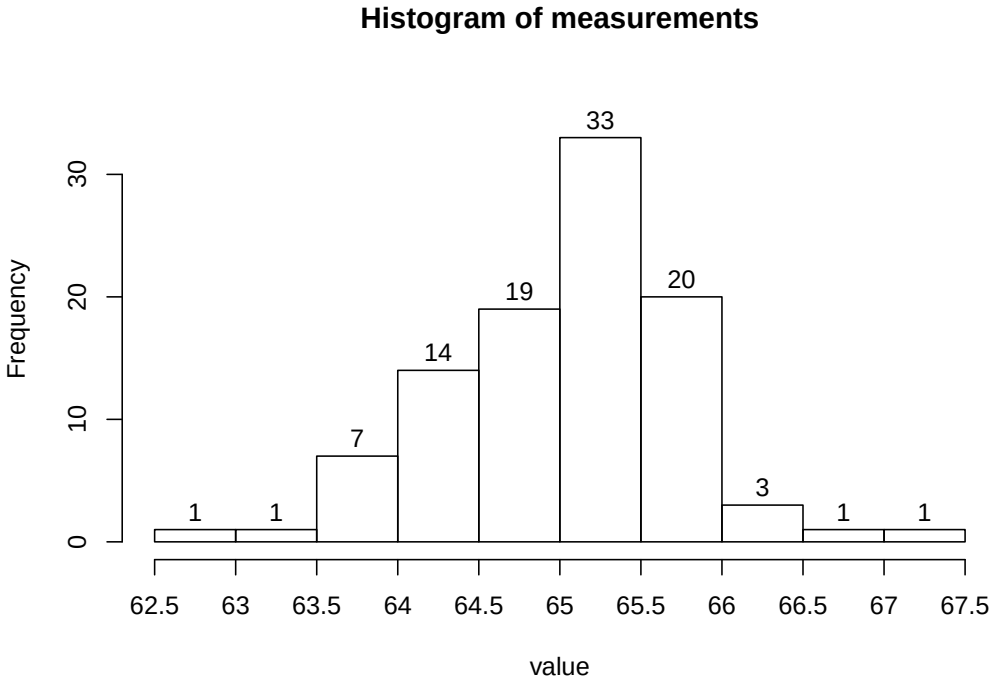
1. **Problem**
   A continuous random variable was measured 100 times. The histogram is shown below.

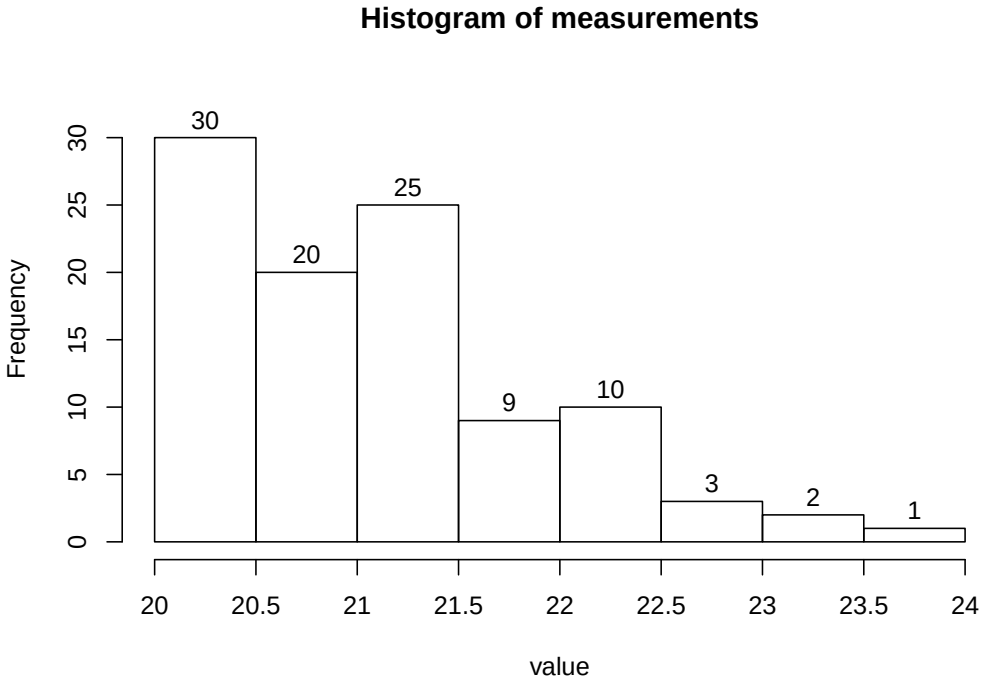


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 65?
   (d) What percent of the measurements are greater than 66?
   (e) Of the measurements greater than 65, what percent are greater than 66?
   (f) Estimate the value of the 9th percentile.

Solution

   (a) symmetric mound
   (b) 5
   (c) 58%
   (d) 5%
   (e) 8.621%
   (f) 64

2. **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 22.5?

(d) What percent of the measurements are less than 23.5?

(e) Of the measurements greater than 22.5, what percent are less than 23.5?

(f) Estimate the value of the 50th percentile.

Solution

(a) skew right

(b) 4

(c) 6%

(d) 99%

(e) 83.33%

(f) 21