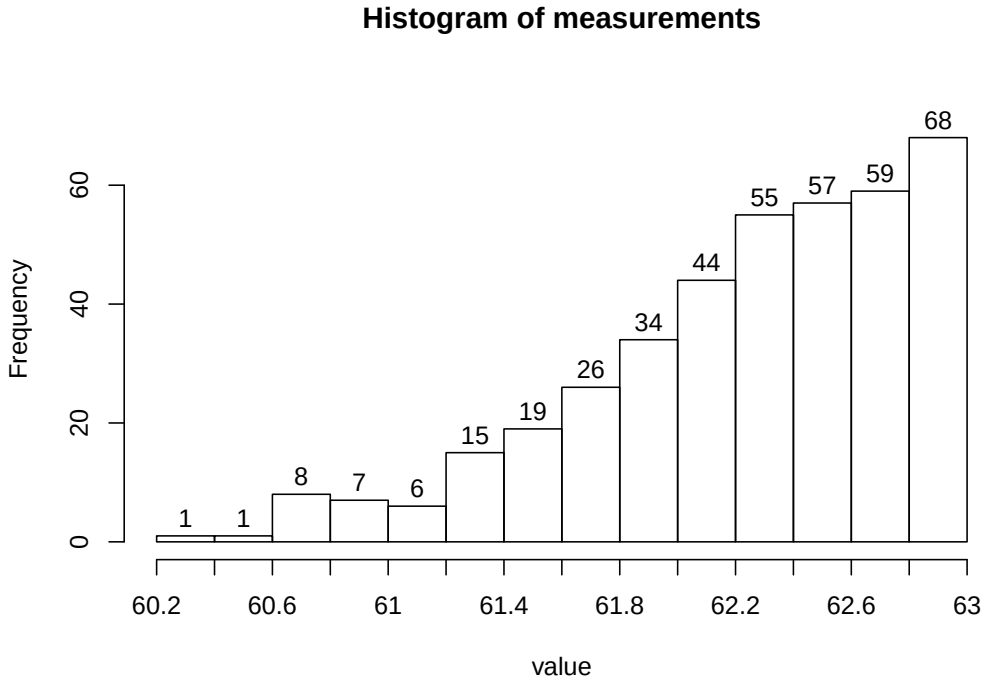
1. **Problem**
   A continuous random variable was measured 400 times. The histogram is shown below.

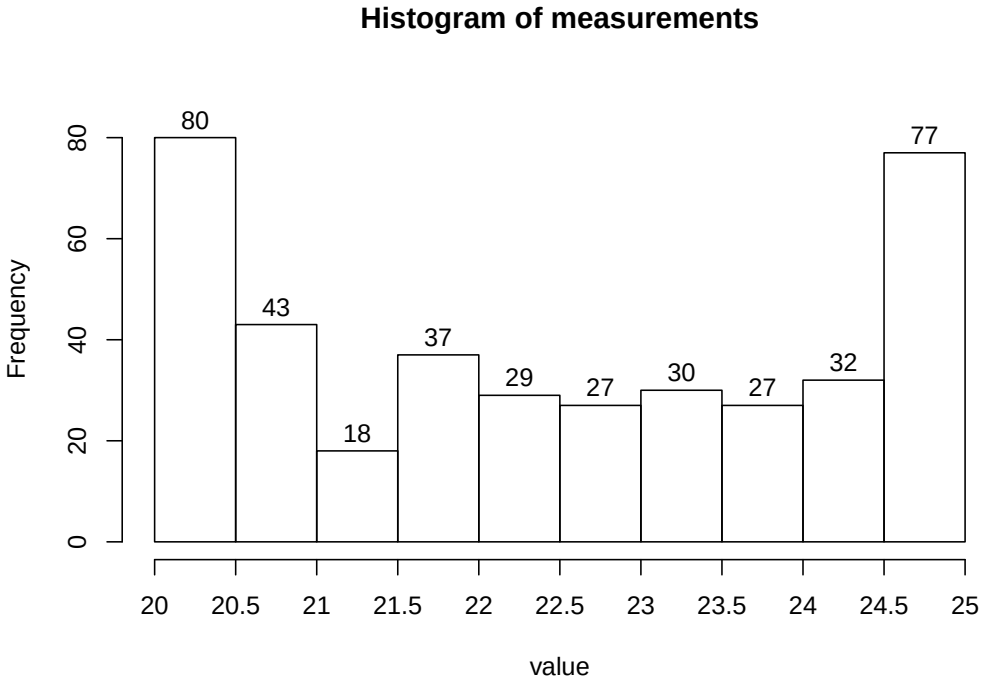


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 61.2?
   (d) What percent of the measurements are greater than 62.4?
   (e) Of the measurements greater than 61.2, what percent are greater than 62.4?
   (f) Estimate the value of the 29.25th percentile.

Solution

   (a) skew left
   (b) 2.8
   (c) 94.25%
   (d) 46%
   (e) 48.81%
   (f) 62

2. **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 21?

(d) What percent of the measurements are greater than 20?

(e) Of the measurements less than 21, what percent are greater than 20?

(f) Estimate the value of the 58.5th percentile.

Solution

(a) bimodal

(b) 5

(c) 30.75%

(d) 100%

(e) 100%

(f) 23