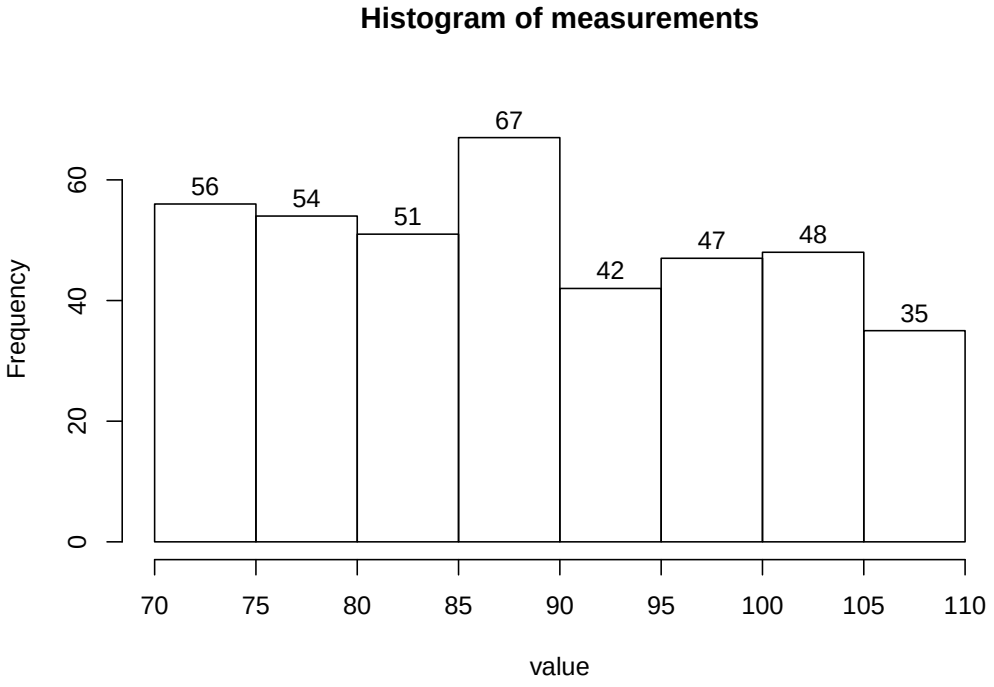
1. **Problem**
   A continuous random variable was measured 400 times. The histogram is shown below.

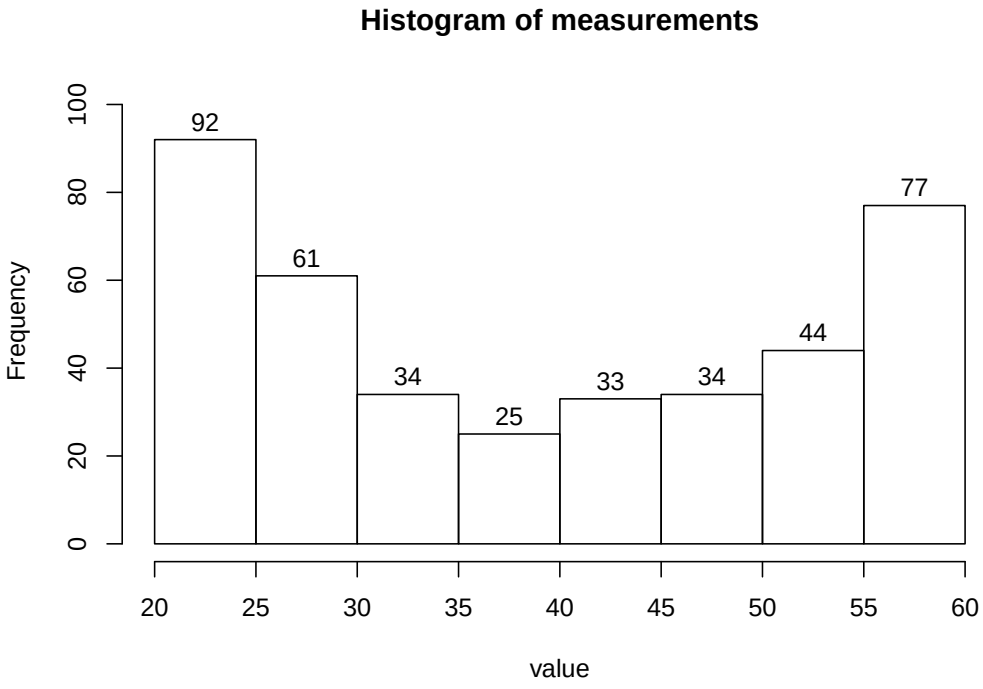


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 90?
   (d) What percent of the measurements are less than 85?
   (e) Of the measurements less than 90, what percent are less than 85?
   (f) Estimate the value of the 67.5th percentile.

Solution

   (a) uniform
   (b) 40
   (c) 57%
   (d) 40.25%
   (e) 70.61%
   (f) 95

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 35?

(d) What percent of the measurements are greater than 25?

(e) Of the measurements less than 35, what percent are greater than 25?

(f) Estimate the value of the 38.25th percentile.

Solution

(a) bimodal

(b) 40

(c) 46.75%

(d) 77%

(e) 50.8%

(f) 30