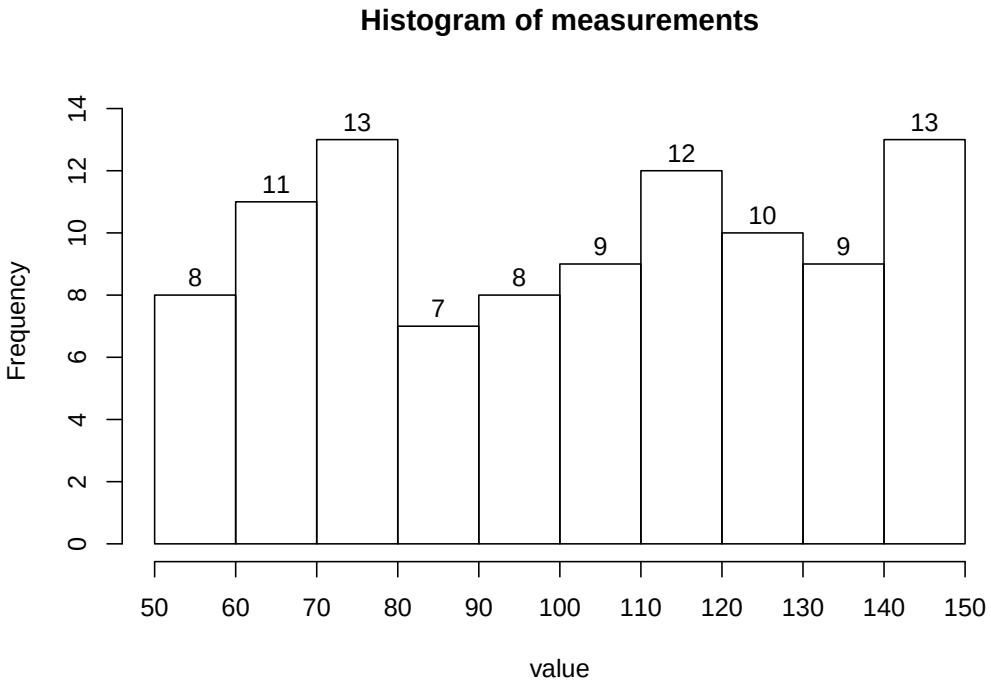
1. **Problem**
   A continuous random variable was measured 100 times. The histogram is shown below.

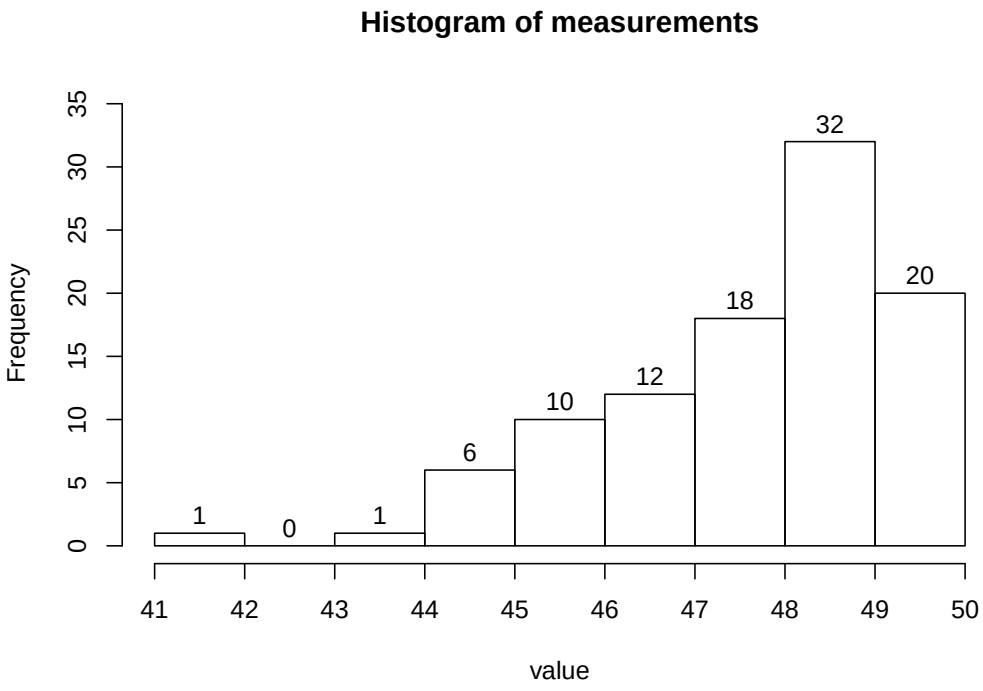


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 120?
   (d) What percent of the measurements are greater than 60?
   (e) Of the measurements less than 120, what percent are greater than 60?
   (f) Estimate the value of the 32th percentile.

Solution

   (a) uniform
   (b) 100
   (c) 68%
   (d) 92%
   (e) 88.24%
   (f) 80

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 less than 46?

(d) What percent of the measurements are less than 45?

(e) Of the measurements less than 46, what percent are less than 45?

(f) Estimate the value of the 1th percentile.

Solution

(a) skew left

(b) 9

(c) 18%

(d) 8%

(e) 44.44%

(f) 43