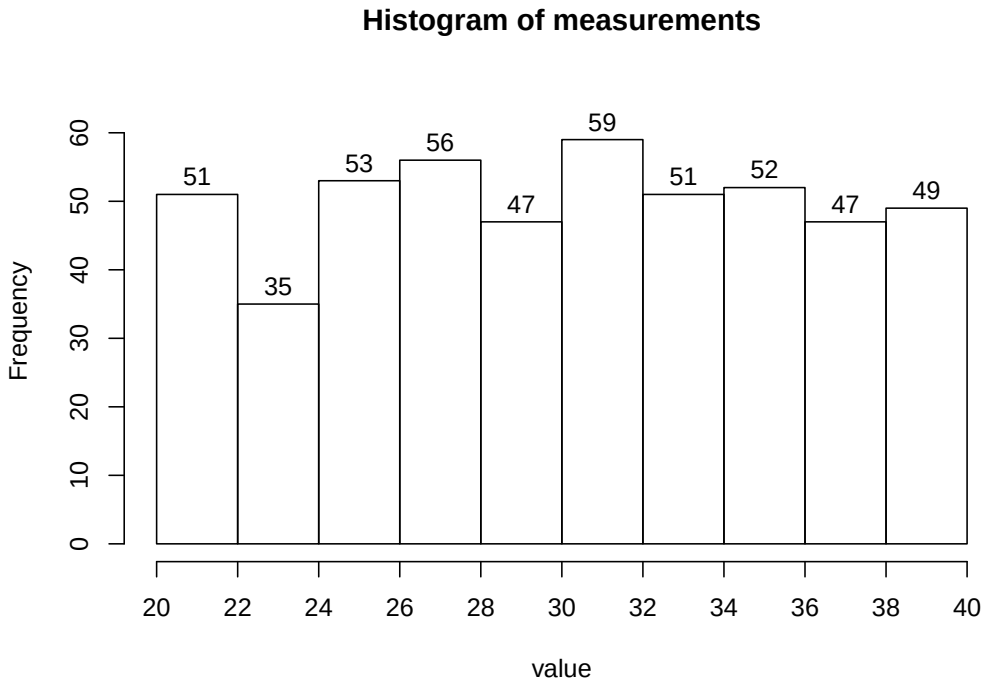
1. **Problem**
   A continuous random variable was measured 500 times. The histogram is shown below.

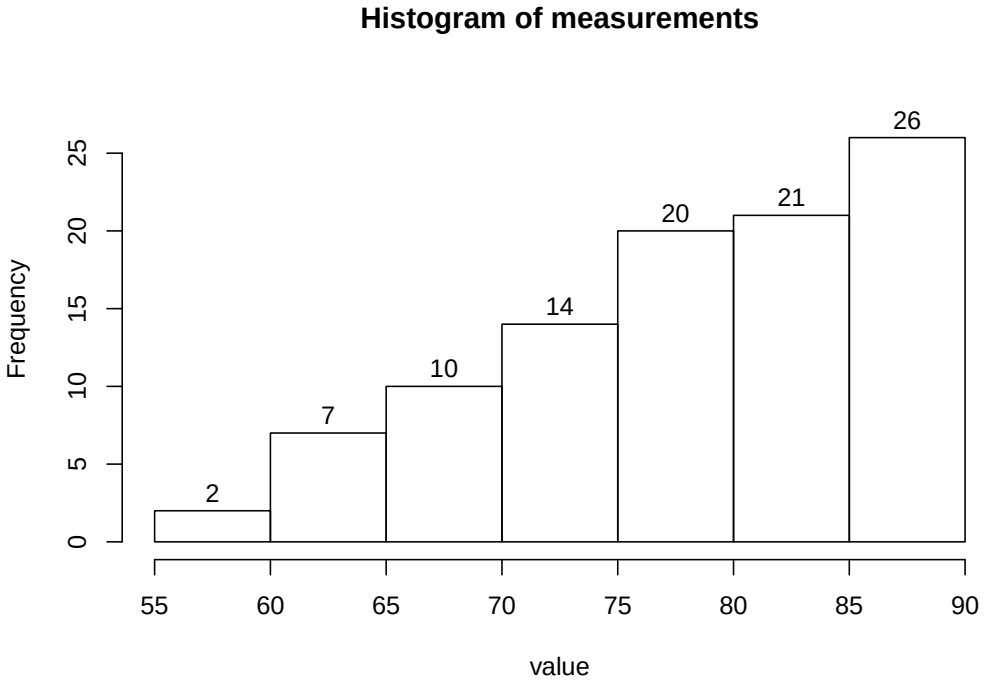


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 34?
   (d) What percent of the measurements are less than 36?
   (e) Of the measurements greater than 34, what percent are less than 36?
   (f) Estimate the value of the 27.8th percentile.

Solution

   (a) uniform
   (b) 20
   (c) 29.6%
   (d) 80.8%
   (e) 35.14%
   (f) 26

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 70?

(d) What percent of the measurements are greater than 85?

(e) Of the measurements greater than 70, what percent are greater than 85?

(f) Estimate the value of the 33th percentile.

Solution

(a) skew left

(b) 35

(c) 81%

(d) 26%

(e) 32.1%

(f) 75