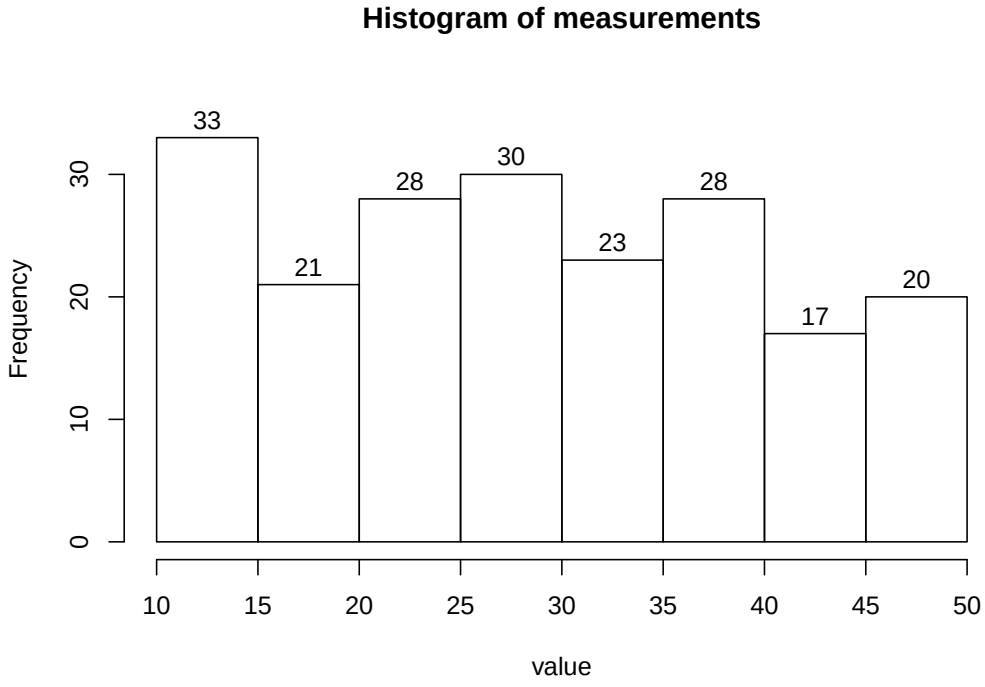
1. **Problem**
   A continuous random variable was measured 200 times. The histogram is shown below.

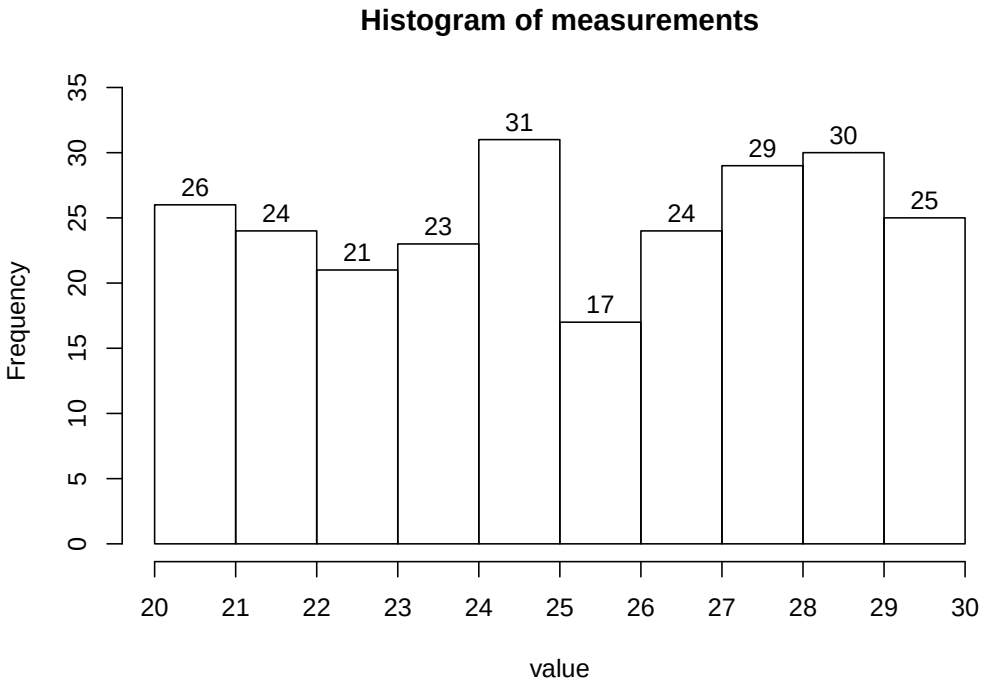


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 30?
   (d) What percent of the measurements are greater than 15?
   (e) Of the measurements less than 30, what percent are greater than 15?
   (f) Estimate the value of the 81.5th percentile.

Solution

   (a) uniform
   (b) 40
   (c) 56%
   (d) 83.5%
   (e) 70.54%
   (f) 40

2. **Problem**
A continuous random variable was measured 250 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 27?

(d) What percent of the measurements are greater than 29?

(e) Of the measurements greater than 27, what percent are greater than 29?

(f) Estimate the value of the 37.6th percentile.

Solution

(a) uniform

(b) 10

(c) 33.6%

(d) 10%

(e) 29.76%

(f) 24