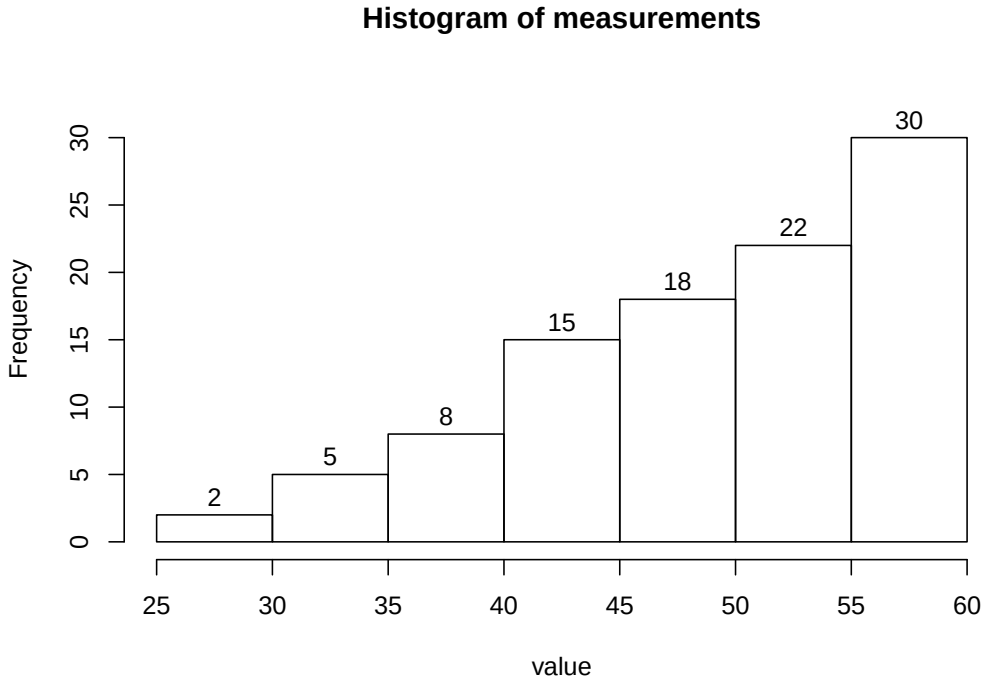
1. **Problem**
   A continuous random variable was measured 100 times. The histogram is shown below.

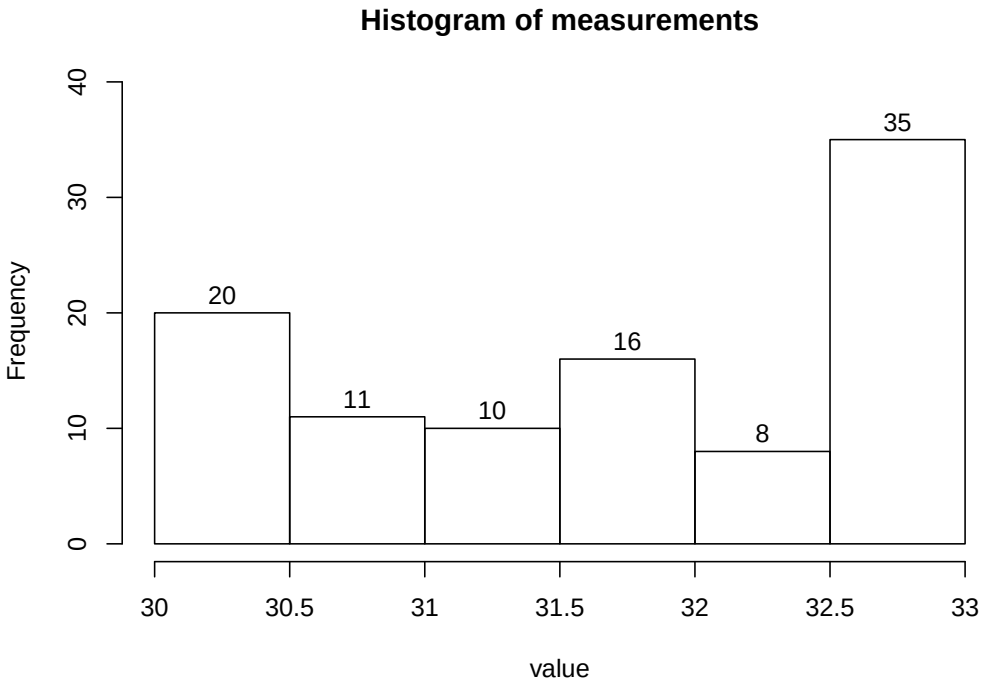


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 35?
   (d) What percent of the measurements are greater than 50?
   (e) Of the measurements greater than 35, what percent are greater than 50?
   (f) Estimate the value of the 30th percentile.

Solution

   (a) skew left
   (b) 35
   (c) 93%
   (d) 52%
   (e) 55.91%
   (f) 45

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 31?

(d) What percent of the measurements are less than 30?

(e) Of the measurements less than 31, what percent are less than 30?

(f) Estimate the value of the 41th percentile.

Solution

(a) bimodal

(b) 3

(c) 31%

(d) 20%

(e) 64.52%

(f) 31.5