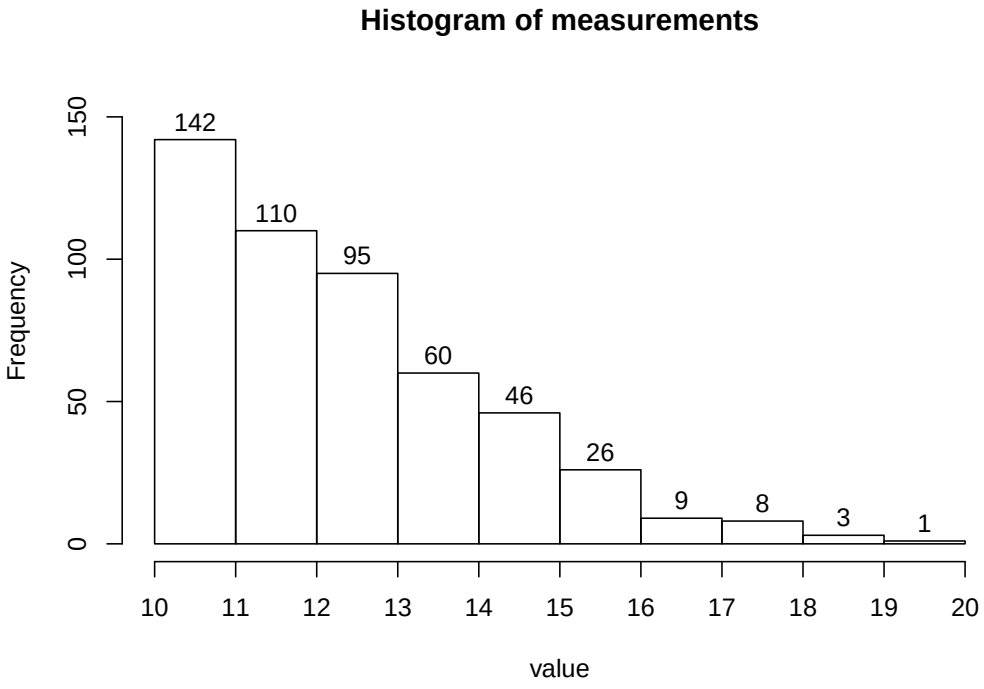
1. **Problem**
   A continuous random variable was measured 500 times. The histogram is shown below.

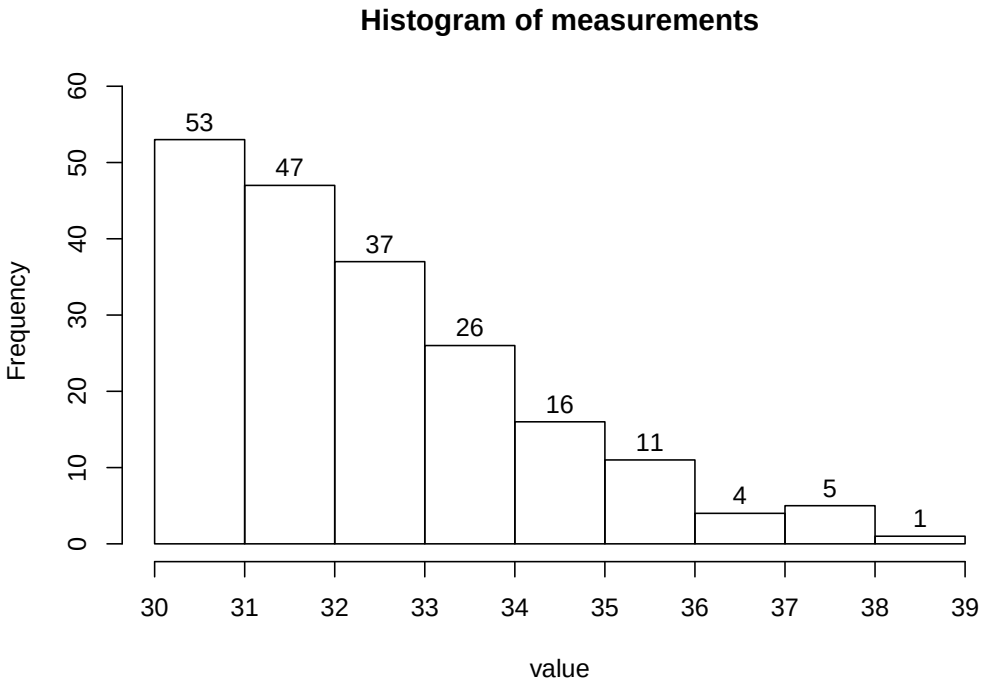


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 12?
   (d) What percent of the measurements are less than 18?
   (e) Of the measurements greater than 12, what percent are less than 18?
   (f) Estimate the value of the 69.4th percentile.

Solution

   (a) skew right
   (b) 10
   (c) 49.6%
   (d) 99.2%
   (e) 98.39%
   (f) 13

2. **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 greater than 34?

(d) What percent of the measurements are greater than 38?

(e) Of the measurements greater than 34, what percent are greater than 38?

(f) Estimate the value of the 68.5th percentile.

Solution

(a) skew right

(b) 9

(c) 18.5%

(d) 0.5%

(e) 2.703%

(f) 33