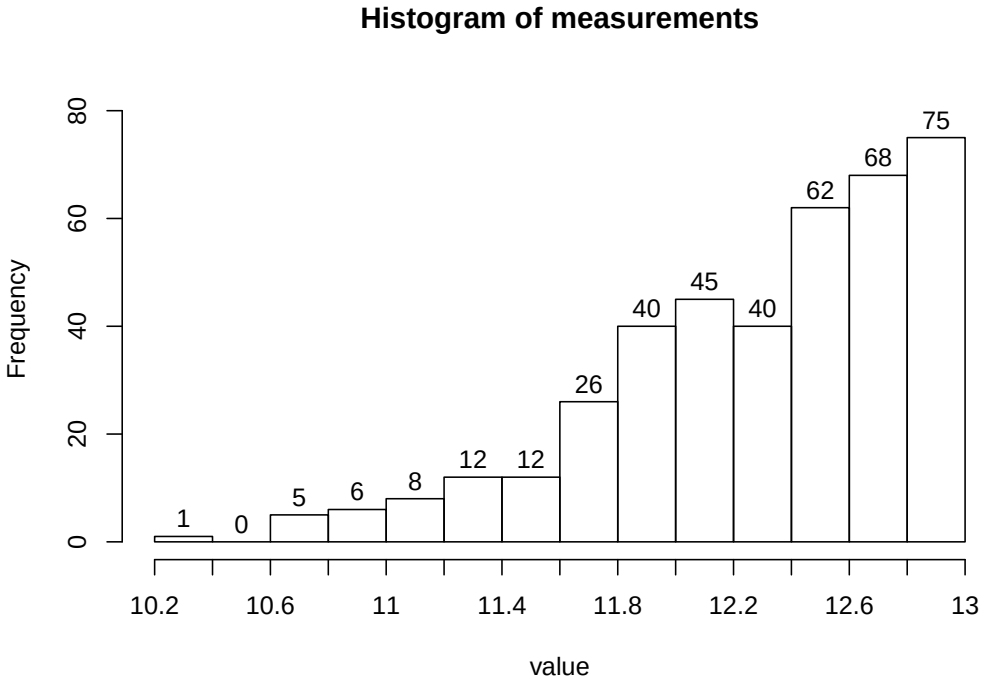
1. **Problem**
   A continuous random variable was measured 400 times. The histogram is shown below.



(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 10.8?

(d) What percent of the measurements are less than 10.6?

(e) Of the measurements less than 10.8, what percent are less than 10.6?

(f) Estimate the value of the 17.5th percentile.

Solution

(a) skew left

(b) 2.8

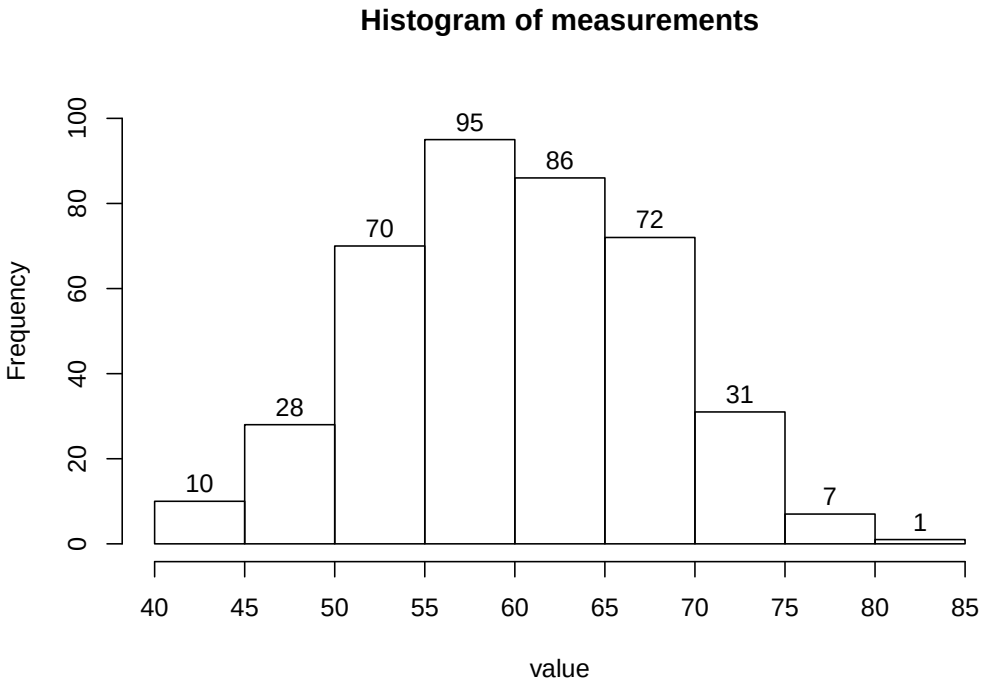
(c) 1.5%

(d) 0.25%

(e) 16.67%

(f) 11.8

2. **Problem**
A continuous random variable was measured 400 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 50?

(d) What percent of the measurements are greater than 40?

(e) Of the measurements less than 50, what percent are greater than 40?

(f) Estimate the value of the 98th percentile.

Solution

(a) symmetric mound

(b) 45

(c) 9.5%

(d) 100%

(e) 100%

(f) 75