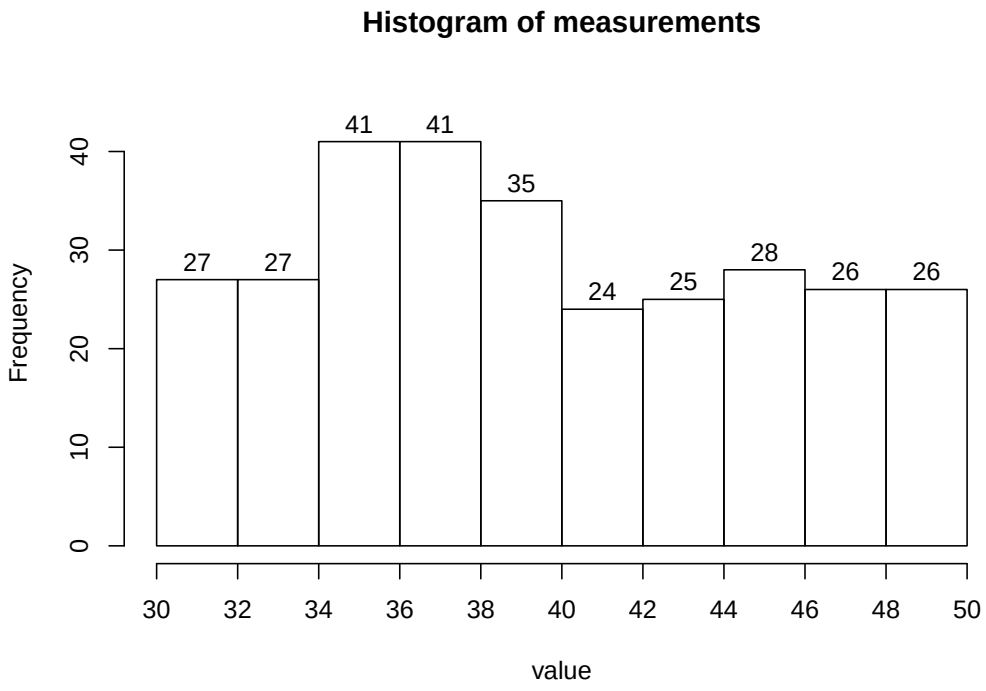
1. **Problem**
   A continuous random variable was measured 300 times. The histogram is shown below.

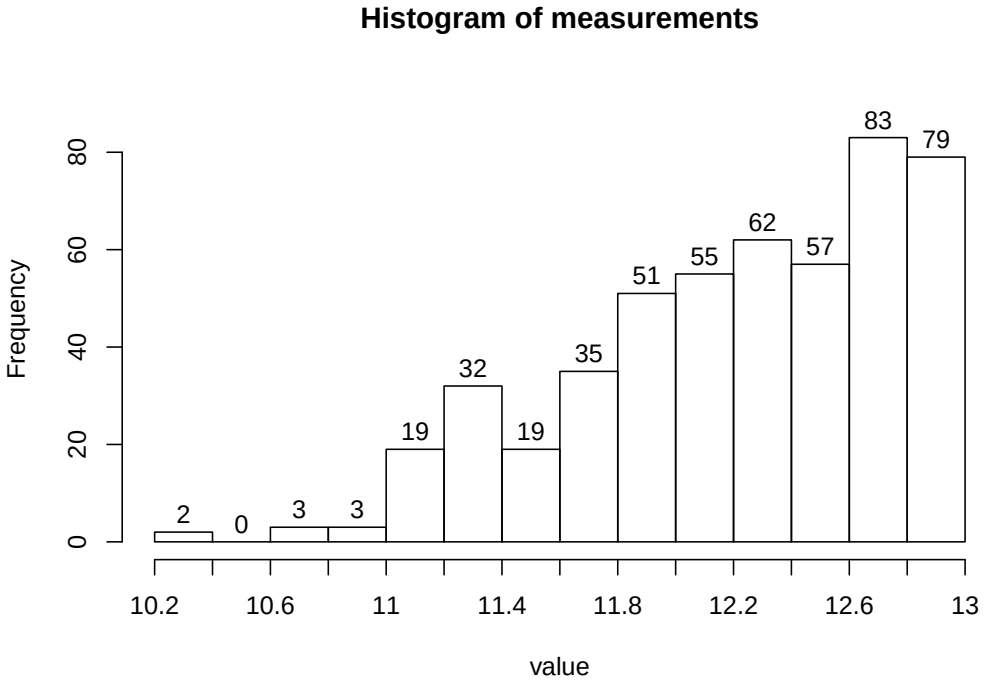



   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are less than 42?
   (d) What percent of the measurements are greater than 38?
   (e) Of the measurements less than 42, what percent are greater than 38?
   (f) Estimate the value of the 9th percentile.

**Solution**

   (a) uniform
   (b) 20
   (c) 65%
   (d) 54.67%
   (e) 30.26%
   (f) 32

2. **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 less than 12.4?

(d) What percent of the measurements are greater than 11.4?

(e) Of the measurements less than 12.4, what percent are greater than 11.4?

(f) Estimate the value of the 5.4th percentile.

**Solution**

(a) skew left

(b) 2.8

(c) 56.2%

(d) 88.2%

(e) 79%

(f) 11.2