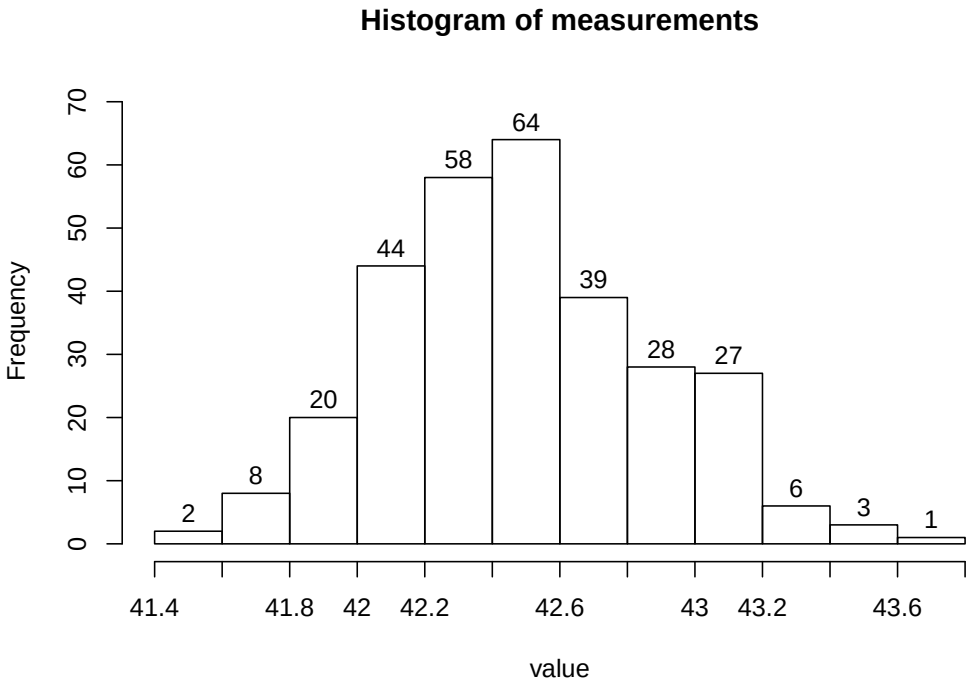
1. **Problem**
   A continuous random variable was measured 300 times. The histogram is shown below.

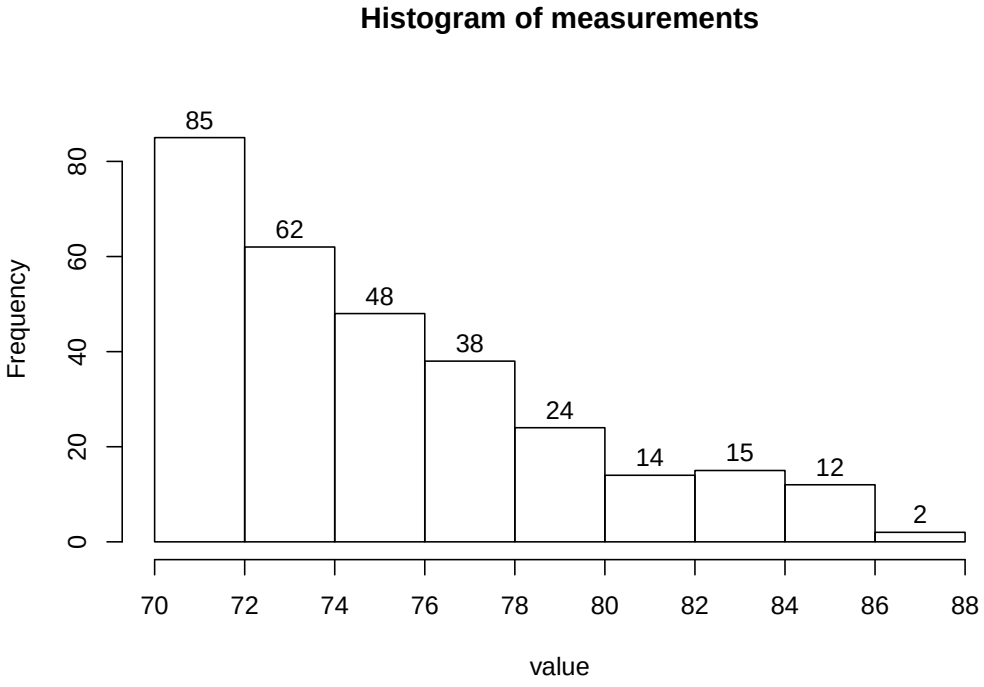


   (a) Describe the overall shape of the distribution. (symmetric mound, skew left, skew right, uniform, or bimodal)
   (b) Estimate the range of the distribution (range = max-min).
   (c) What percent of the measurements are greater than 42.6?
   (d) What percent of the measurements are less than 42.8?
   (e) Of the measurements greater than 42.6, what percent are less than 42.8?
   (f) Estimate the value of the 24.67th percentile.

Solution

   (a) symmetric mound
   (b) 2.4
   (c) 34.67%
   (d) 78.33%
   (e) 37.5%
   (f) 42.2

2. **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 greater than 74?

(d) What percent of the measurements are greater than 80?

(e) Of the measurements greater than 74, what percent are greater than 80?

(f) Estimate the value of the 65th percentile.

Solution

(a) skew right

(b) 18

(c) 51%

(d) 14.33%

(e) 28.1%

(f) 76