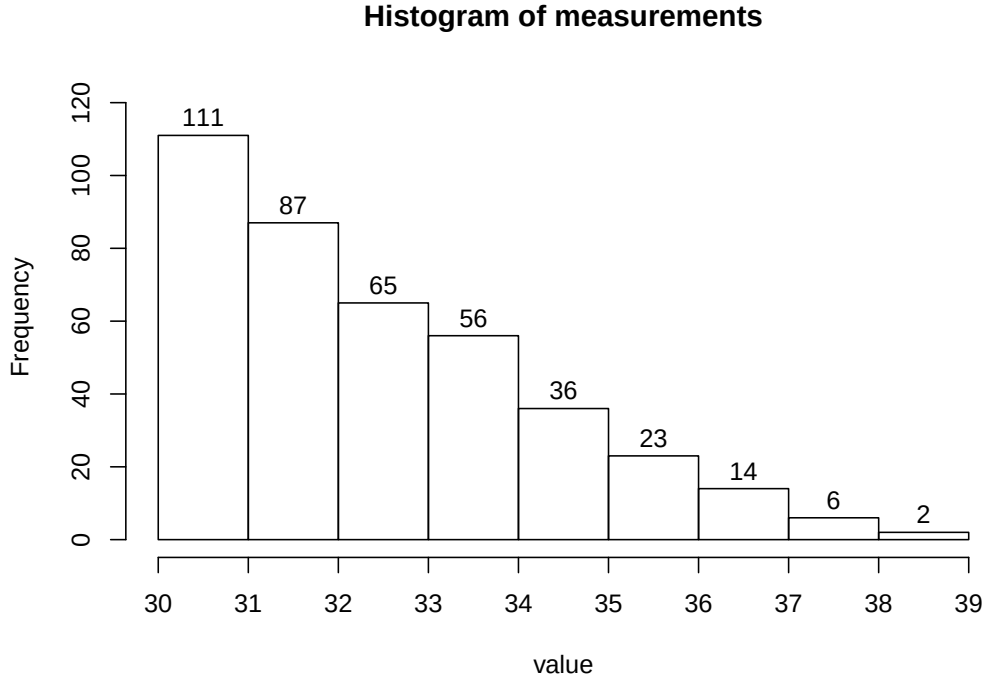
1. **Problem**
   A continuous random variable was measured 400 times. The histogram is shown below.



(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).

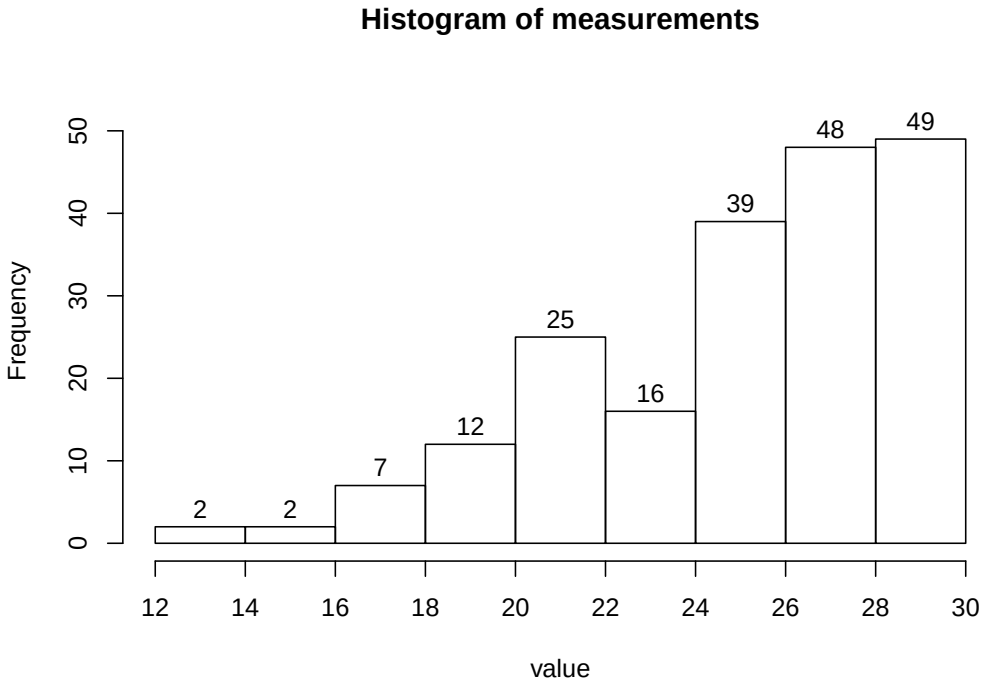
(c) What percent of the measurements are greater than 35?

(d) What percent of the measurements are less than 37?

(e) Of the measurements greater than 35, what percent are less than 37?

(f) Estimate the value of the 79.75th percentile.

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).

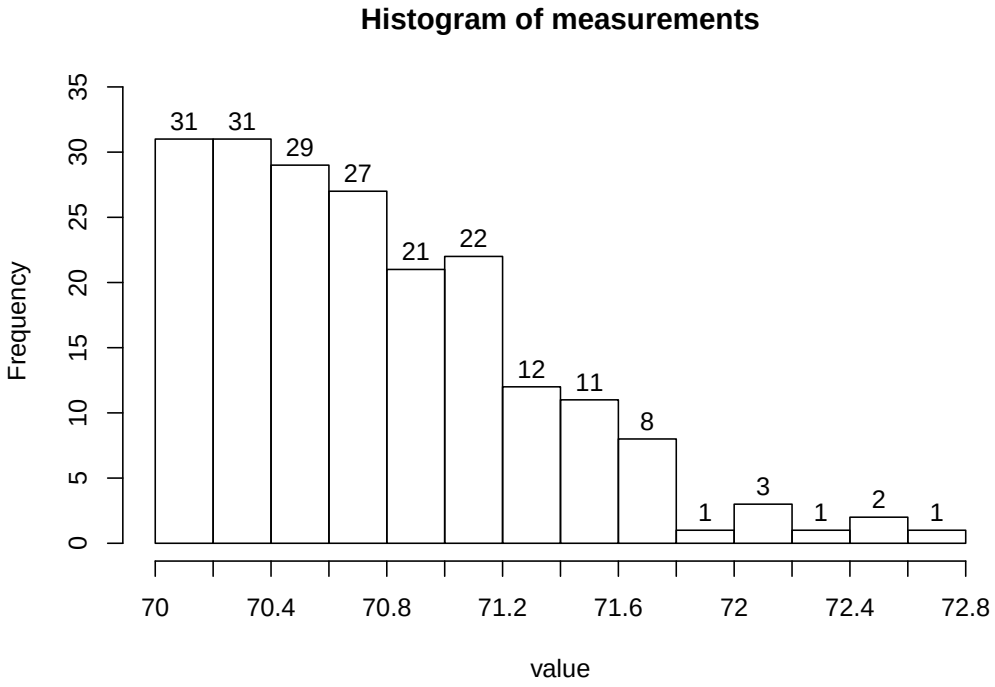
(c) What percent of the measurements are less than 24?

(d) What percent of the measurements are less than 14?

(e) Of the measurements less than 24, what percent are less than 14?

(f) Estimate the value of the 5.5th percentile.

3. **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).

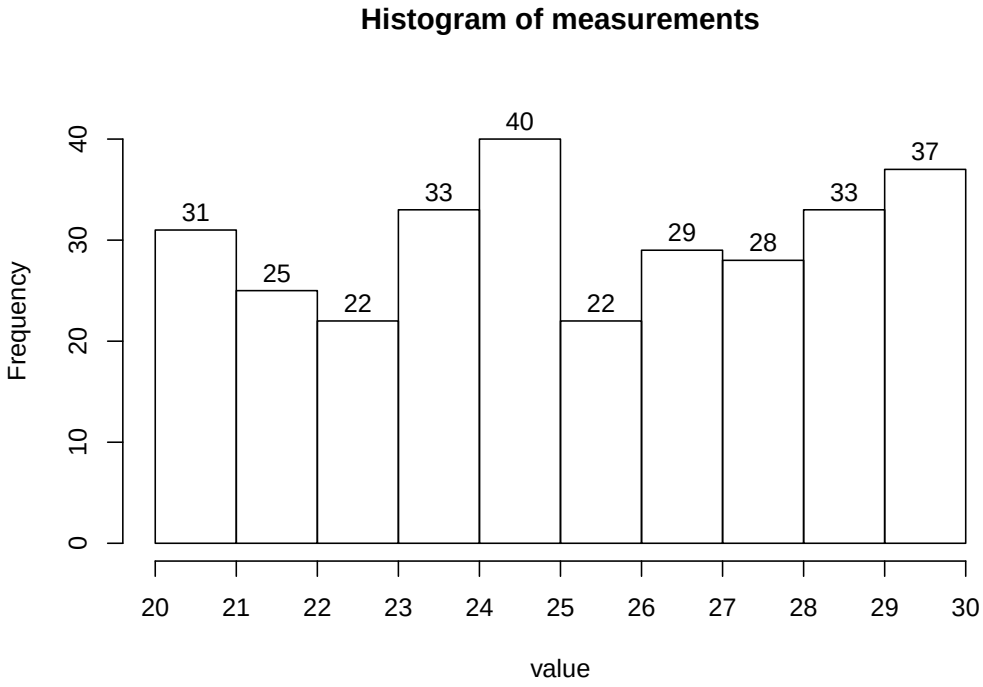
(c) What percent of the measurements are greater than 71.4?

(d) What percent of the measurements are greater than 72?

(e) Of the measurements greater than 71.4, what percent are greater than 72?

(f) Estimate the value of the 80.5th percentile.

4. **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).

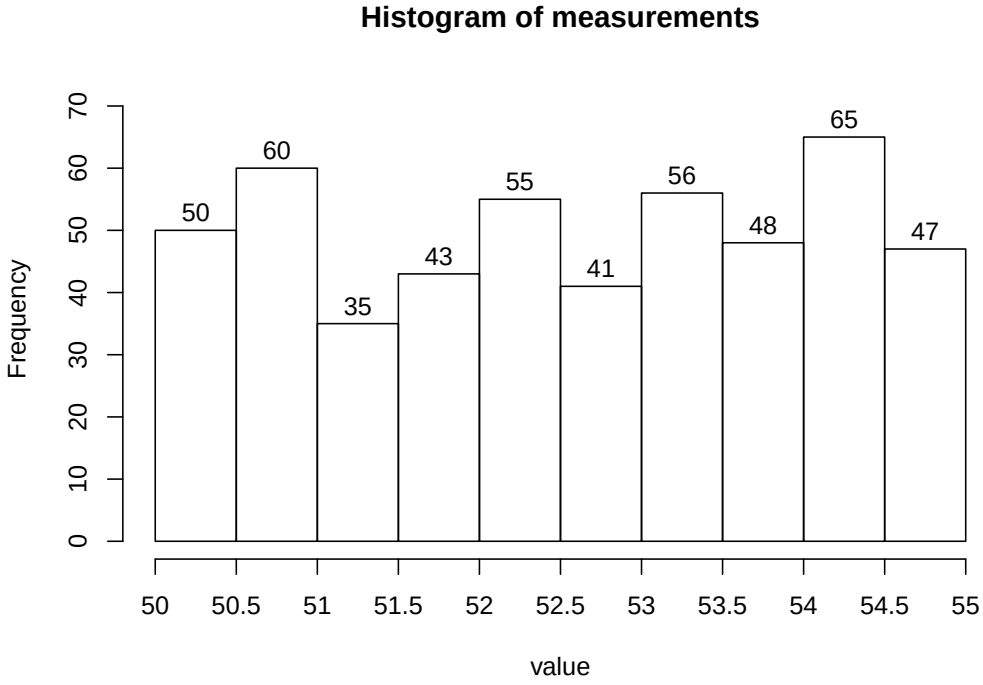
(c) What percent of the measurements are greater than 27?

(d) What percent of the measurements are less than 28?

(e) Of the measurements greater than 27, what percent are less than 28?

(f) Estimate the value of the 37th percentile.

5. **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).

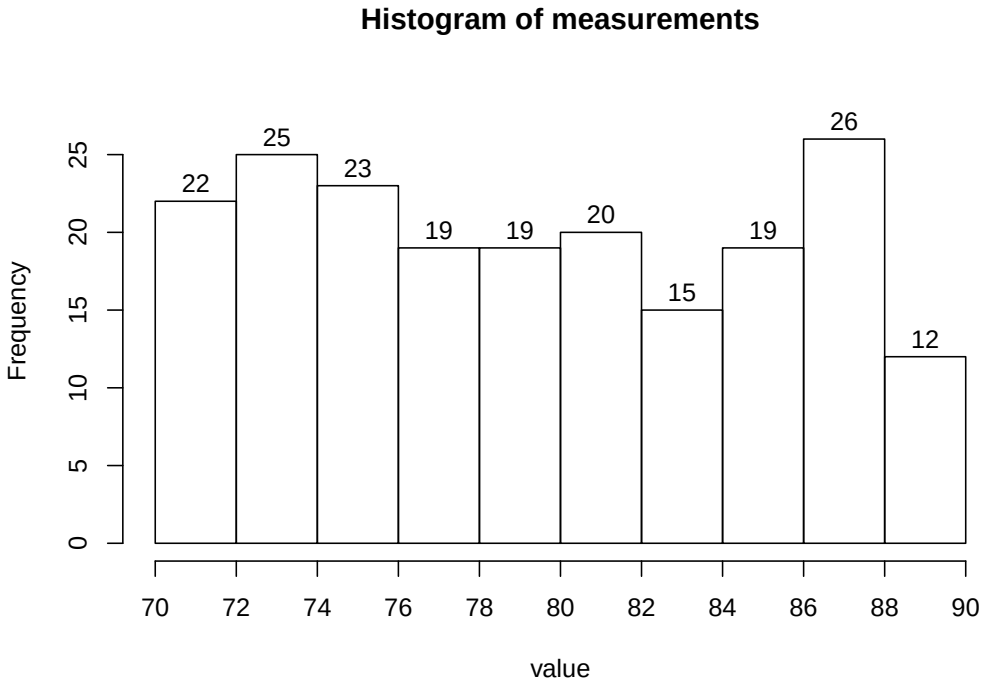
(c) What percent of the measurements are greater than 52?

(d) What percent of the measurements are less than 54?

(e) Of the measurements greater than 52, what percent are less than 54?

(f) Estimate the value of the 68th percentile.

6. **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).

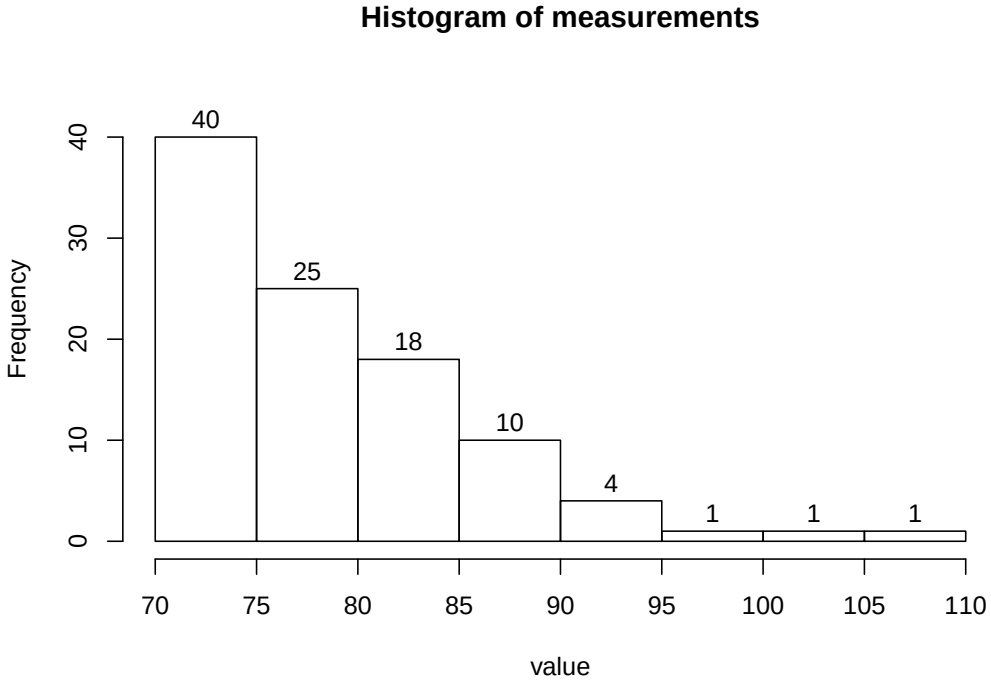
(c) What percent of the measurements are greater than 74?

(d) What percent of the measurements are less than 88?

(e) Of the measurements greater than 74, what percent are less than 88?

(f) Estimate the value of the 11th percentile.

7. **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).

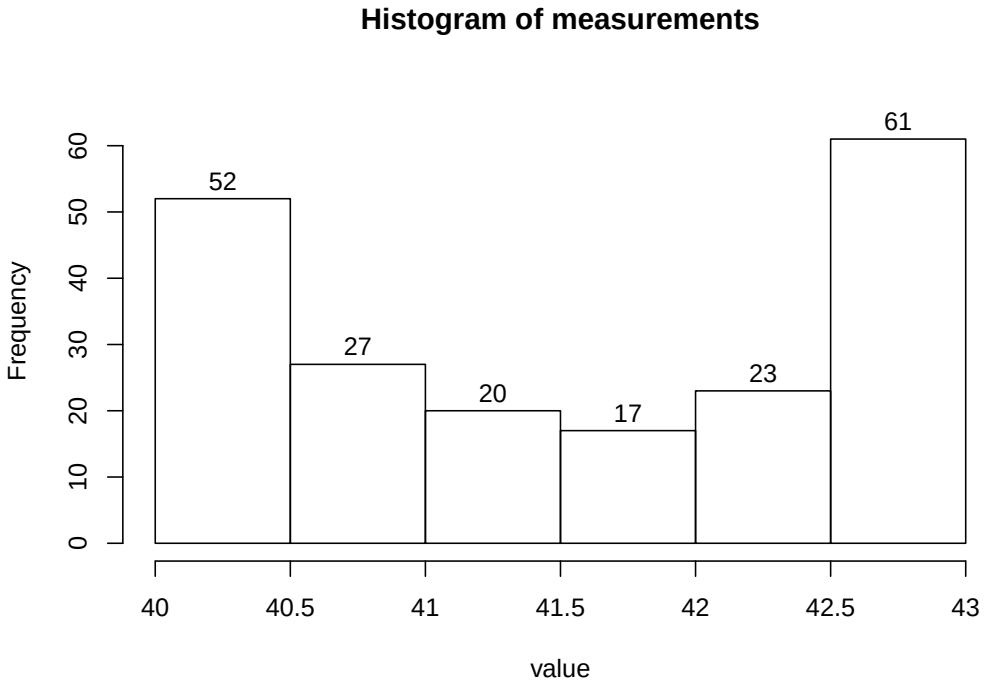
(c) What percent of the measurements are greater than 85?

(d) What percent of the measurements are greater than 100?

(e) Of the measurements greater than 85, what percent are greater than 100?

(f) Estimate the value of the 40th percentile.

8. **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).

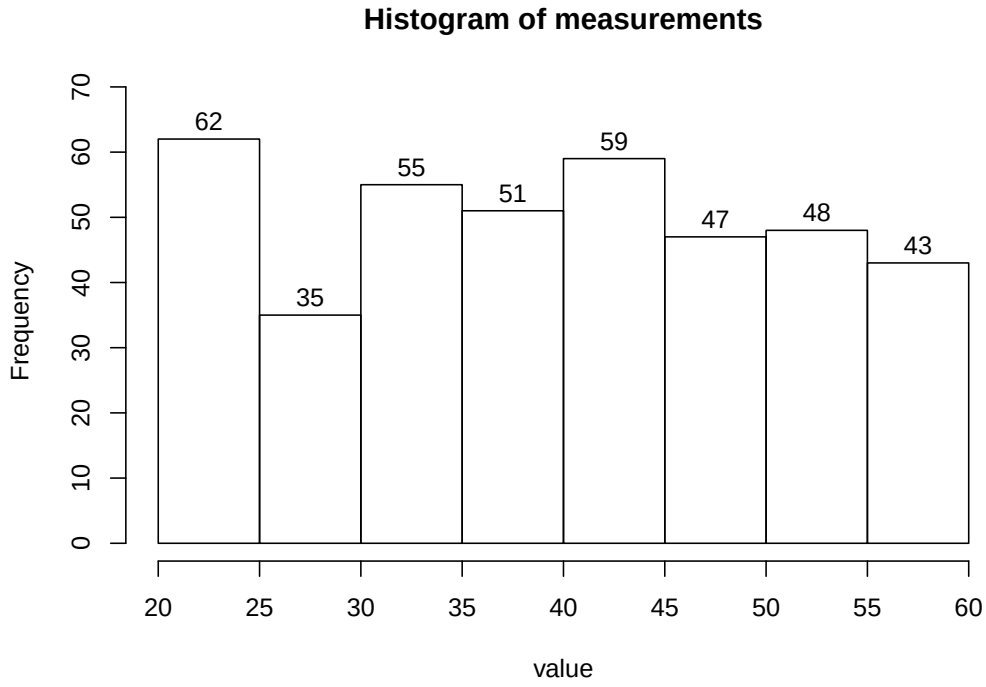
(c) What percent of the measurements are greater than 41?

(d) What percent of the measurements are greater than 42.5?

(e) Of the measurements greater than 41, what percent are greater than 42.5?

(f) Estimate the value of the 26th percentile.

9. **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 30?

(d) What percent of the measurements are less than 25?

(e) Of the measurements less than 30, what percent are less than 25?

(f) Estimate the value of the 77.25th percentile.

1. (a) skew right
   (b) 9
   (c) 11.25%
   (d) 98%
   (e) 82.22%
   (f) 34
2. (a) skew left
   (b) 18
   (c) 32%
   (d) 1%
   (e) 3.125%
   (f) 18
3. (a) skew right
   (b) 2.8
   (c) 13.5%
   (d) 3.5%
   (e) 25.93%
   (f) 71.2
4. (a) uniform
   (b) 10
   (c) 32.67%
   (d) 76.67%
   (e) 28.57%
   (f) 24
5. (a) uniform
   (b) 5
   (c) 62.4%
   (d) 77.6%
   (e) 64.1%
   (f) 53.5
6. (a) uniform
   (b) 20
   (c) 76.5%
   (d) 94%
   (e) 92.16%
   (f) 72
7. (a) skew right
   (b) 40
   (c) 17%
   (d) 2%
   (e) 11.76%
   (f) 75
8. (a) bimodal
   (b) 3
   (c) 60.5%
   (d) 30.5%
   (e) 50.41%
   (f) 40.5
9. (a) uniform
   (b) 40
   (c) 24.25%
   (d) 15.5%
   (e) 63.92%
   (f) 50