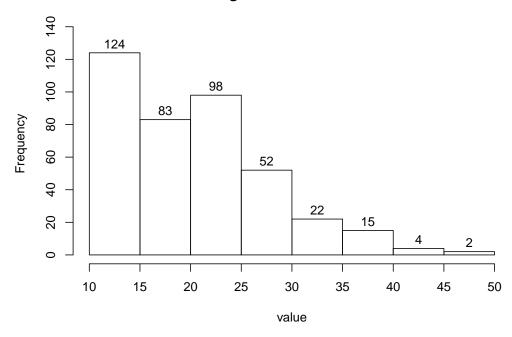
#### 1. Problem

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

### Histogram of measurements



- (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 greater than 45?
- (e) Of the measurements greater than 35, what percent are greater than 45?
- (f) Estimate the value of the 98.5th percentile.

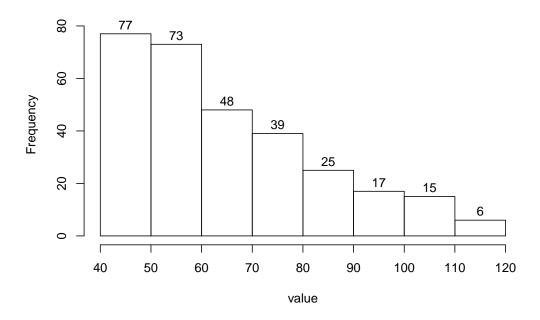
### **Solution**

- (a) skew right
- (b) 40
- (c) 5.25%
- (d) 0.5%
- (e) 9.524%
- (f) 40

#### 2. Problem

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

## **Histogram of measurements**



- (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 80?
- (d) What percent of the measurements are greater than 100?
- (e) Of the measurements greater than 80, what percent are greater than 100?
- (f) Estimate the value of the 50th percentile.

# Solution

- (a) skew right
- (b) 80
- (c) 21%
- (d) 7%
- (e) 33.33%
- (f) 60