

# HISTOGRAM HOMEWORK

TEXT: 2.2

LAST NAME	FIRST NAME	DATE
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This homework should be done with R or a comparable technology, and should be uploaded to Canvas as an office document or a PDF.

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For each of the following datasets,

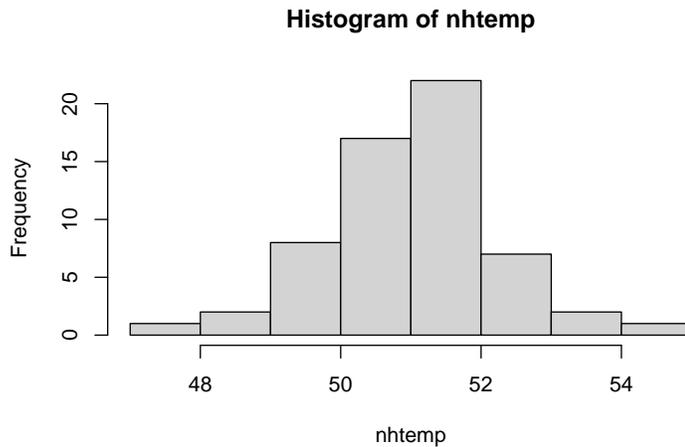
- (a) Construct a histogram.
- (b) Describe the shape of the distribution.
- (c) Describe *typical* measurements and conjecture how they might compare to the *average* measurement.

1. The `nhtemp` dataset of temperature measurements in New Haven, CT in °F.
2. The `trees$Volume` dataset of tree volumes in cubic feet.
3. The `faithful$eruptions` dataset of eruption times in minutes.
4. The `faithful$waiting` dataset of waiting times to the next eruption.
5. The `chickwts$weight` dataset of chick weights.
6. The `state.center$x` dataset of longitudes.
7. The `state.center$y` dataset of latitudes.
8. The `treering` dataset of tree-ring widths in dimensionless units.
9. The `pressure$temperature` dataset of temperatures in °C.
10. The `pressure$pressure` dataset of pressures in minutes of mercury.

# ANSWERS

1.

(a)

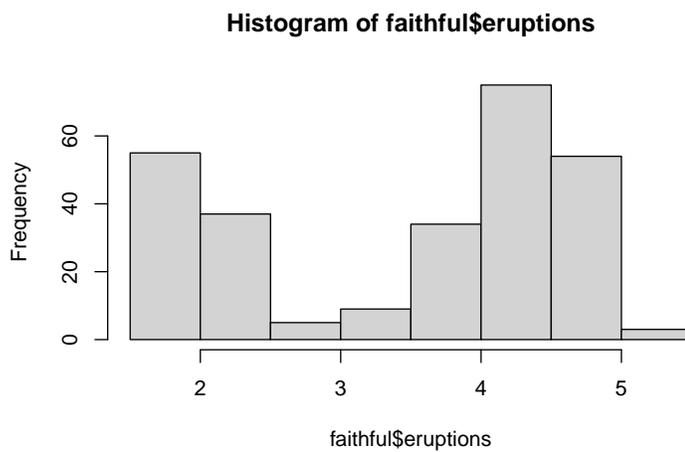


(b) Bell-shaped and symmetric

(c) A typical temperature is about  $51^{\circ}\text{F}$  and the average is about the same.

3.

(a)



(b) Bimodal

(c) Typical eruption times are 2 minutes and 4.5 minutes, and the average is likely somewhere in the middle, around 3.5 minutes.