

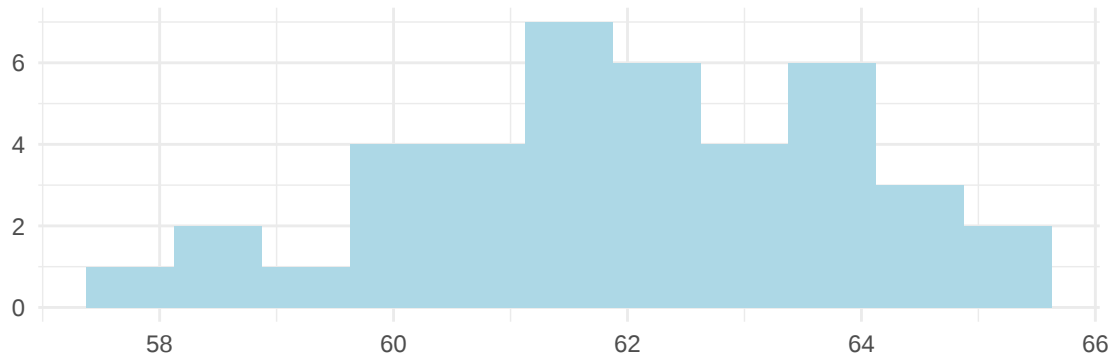
Concept Check #3

HST 190: Introduction to Biostatistics

This worksheet is open-note. Take 15 minutes to consider the following questions. We will discuss as a group.

1. The heights of 40 female college students are plotted below. Do these data appear to follow a Normal distribution?

Heights of 40 female college students



2. The World Health Organization defines osteoporosis in young adults as a measured bone mineral density 2 or more standard deviations below the mean for young adults. Assuming that bone mineral density follows a Normal distribution in young adults, about what percentage of young adults suffer from osteoporosis according to this criterion? (Hint: Recall the “empirical rule” summarized in this figure below.)

