3 4 5 6 7

3 4 5 6 7

3 4 5 6 7

3 4 5 6 7

3 4 5 6 7

3 4 5 6 7

• Calculate the mean/average for each distribution. Label that value on each graph.

• Create a box plot above each histogram. Note the location of the median and the mean (left? Right? Center?). Are they the same?

• Let’s stop for a discussion on how the graphs make sense, when compared to one another.

• For the first histogram, which has more data, the third or fourth quartile?

• For the last histogram, which has more data. The interval 3 to 5, or the interval 6 to 7? How can you use the box plot to argue your point?

A study was conducted to see the effect of exercise on pulse rate. Female subjects were taken who do not smoke, but do drink. Their pulse rates were measured. They ran in place for one minute and then measured their pulse rate again.

• Which box and whisker has the higher median?

• Which box and whisker has the higher mean?

• Which box and whisker has the larger standard deviation and why?

• For the before graph, which interval has more data, 50 to 70, or 70 to 80?

• For the after graph, which interval has more data, 110 to 140, or 140 to 175?

• The before graph has a range from about 45 to 100. The after graph has a range from about 85 to 175. Does that mean that the after graph has more data values, because it’s more spread out? Explain your answer.

• Which graph seems more likely to be skewed? Also, what type of skew would you think it is?

• Which graph looks more symmetrical?