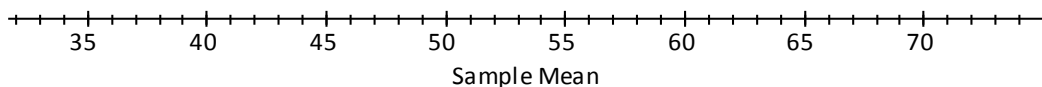


**Exercises 8–11**

You will now use the sample means from Exercise 7 from the entire class to make a dot plot.

8. Write the sample means for everyone in the class in the space below.
9. Use all the sample means to make a dot plot using the axis given below. (Remember, if you have repeated or close values, stack the dots one above the other.)



10. What do you see in the dot plot that demonstrates sampling variability?
11. Remember that in practice you only take one sample. (In this lesson, many samples were taken in order to demonstrate the concept of sampling variability.) Suppose that a statistician plans to take a random sample of size 5 from the population of times spent at the gym and that he will use the sample mean as an estimate of the population mean. Approximately how far can the statistician expect the sample mean to be from the population mean?