Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Investigation 14: How Long Do the Subway Doors Stay Open?**

**Exit Ticket**

Alicia, a senior in High School would like to find out how her SAT score compared with other seniors who took the SAT test. She decided to investigate the question: What is a typical score on the math portion of the SAT test?

The College Board reported in 2016 that approximately 1.7 million high school students took the SAT test. The scores on the math portion of the test were approximately Normally distributed with a mean score of 513 and standard deviation of approximately 118.

1. Draw Normal curve and mark the mean and one standard deviation and two standard deviations from the mean.
2. What proportion of scores is within one standard deviation of the mean?
3. What proportion of SAT scores are between 277 and 749?
4. If Alicia had a score of 631, approximately what percent of the students did she do better than?