Empirical Rule Worksheet

Directions: Work through the problems through the class period. If you finish with time to spare, grab a Chrome book and work on ALEKS. If you don’t finish by the end of class, then it will become homework.

For each question draw the bell curve and label each of the 7 lines and answer the question(s).

1. The average human lifespan is 79 years with a standard deviation of 15 years. What percent of people live to be between 64 and 94 years (Hint: shade in the space to help)?



1. The average IQ is 100 with a standard deviation of 13 IQ points. What percent of people have an IQ between 100 and 134 points (Hint: shade in the space to help)?



1. Timmy is a math teacher with 24 students in his class. His last test has a mean score of 79 with a standard deviation of 9.5 points. How many students have a score between 60 and 98?



1. A resting heart rate has a mean of 80 beats per minute and a standard deviation of 15 beats per minute. If 100 people went to the doctor and had their resting heart rate tested, how many of them had a heart rate between 65 and 80 beats per minute?



1. The average ACT score is a 20.8 with a standard deviation of 5.4. If 500 students take the ACT how many students have scores between 4.6 and 20.8? What percent scored between a 20.8 and 37?



Bonus: 6) The average score for the test was an 89 and the standard deviation was 6.5.



1. What percent scored between 82.5 and 89
2. If Billy scored an 88% how did he do compared to is peers?