Name:

Section 2 – Practice Test

1. What is the mean, median, and mode of the following set of data

$$3, 6, 8, 1, 9, 12, 8$$

2. What is the Standard Deviation of the Data from Question 1.

$$\sigma = \sqrt{\frac{(x_1 - \mu)^2 + (x_2 - \mu)^2 + \cdots + (x_n - \mu)^2}{n}}$$

3. What is the probability of the corresponding Z Scores?

    0.9989   0.6406   0.1736   0.0038

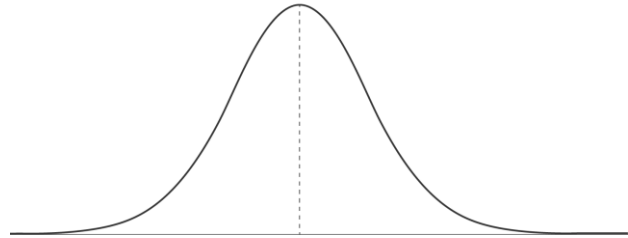4. What are the Probabilities related to the following Z-Scores?

    0.95 -1.93 -0.76 1.67

$$Z = \frac{x - \mu}{\sigma} \qquad P\left(z < \frac{x - \mu}{\sigma}\right)$$

5. If there are 430 students who take the numeracy assessment and the average score on the test was 84%. With a standard deviation of 12%. How many students got below 70%?
   Draw the representation of this on the Normal Curve Provided.

6. If the average score for a golf round at Cedar Hill is 80 strokes with a Standard Deviation of 9. What is the probability that someone takes only 65 strokes? Show your results on the Normal Curve.
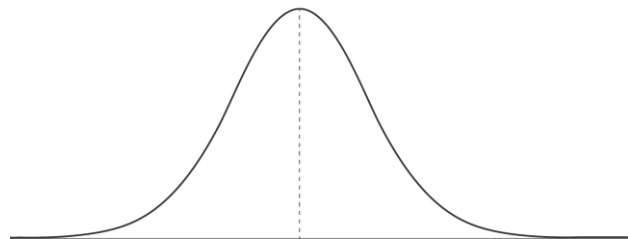
7. If the average dart score is 165 with a standard deviation of 17 and a sample size of 81. What is the true mean with a 90% confidence interval.

8. If a sample size of 100 people produced an average IQ score of 98 with a standard deviation of 8. What is the true mean given a 99% confidence interval?