**Part VI: Chapter 6: Probabilities for Normal Distributions**

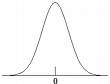
**Task 1: Construct a histogram and boxplot of the height of the participants using the “explore data” function in Statdisk.**

**Describe how this histogram and boxplot fit the definition of approximately normal. Be sure to paste the results screen below. Identify the mean and standard deviation.**

**Task 2: What is the probability that a participant will be less than 4 feet, 5 inches tall?**





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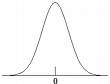
**Task 3: An examination of the distribution of this data for age reveals an approximately normal distribution shape. Open the data set and run the descriptive statistics for the age column to get the mean and standard deviation. Use this information to calculate the needed z scores, find the probability assuming a normal distribution and draw the area associated with the requested probability.**

**What is the probability that a selected participant will be between 10 and 12 years old inclusive?**





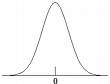


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**Task 4: If a group of 9 participants are randomly selected, find the probability that their mean age will be at least 11 years old.**





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