Algebra II Journal

Module 3: Standard Deviation

X…Y…Zzzzzzz

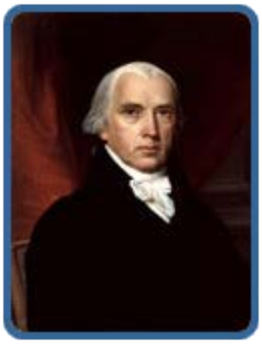
This journal belongs to:

Algebra II Journal: Reflection 1

In this lesson, you estimated areas under normal curves. You utilized the statistical features of the graphing calculator to generate graphs to display areas under normal curves as well as calculated the areas under the curve.

In a previous lesson, Andrew and Khalid researched the different heights of the presidents. They found that the tallest presidents of the United States were Abraham Lincoln and Lyndon B. Johnson. Both of these presidents were 193 centimeters (6 feet 4 inches) tall, and the shortest president was James Madison at 163 centimeters (5 feet 4 inches tall).





Through their data analysis, the boys discovered that the heights of the presidents form a normal distribution with mean μ = 179.628 centimeters and a standard deviation σ = 6.922 centimeters.

Respond to the following reflection questions and submit to your teacher.

Use the graphing calculator to construct the normal curve of this normal distribution.

Create three questions that require someone to utilize the statistical features of the graphing calculator to calculate and analyze the area under the normal curve for the presidents' heights. Be sure to provide the solutions to your questions.