Name _____

Worksheet 3: Around the Earth

Problem: The Earth has an equatorial radius of 3963 miles. (There are 5280 feet in one mile.) Imagine a string wrapped around the equator of a perfectly smooth Earth. Suppose we now add 15 ft to the length of the string and shape the longer string into a smooth circle with its center still at the center of the earth.

How far will the string now stand away from the surface of the earth? (Be sure to make the calculation in the simplest way. Avoid doing irrelevant calculations and using irrelevant data. The *Circumference* vs. *Diameter* graph can be helpful. Show your work below.