# Name:

GEOG 3305

# **Lab 9: Projecting Geographic Data**

**Question 9.1.** What is the distance (in miles) between the two cities on the Albers map? Look at the Distance information inside the drop-down window to help you determine the distance between the two cities.

**Question 9.2**. What is the distance (in miles) between the two cities on the Mercator map?

**Question 9.3**. Based on your two previous answers, do you see similar distances between Los Angeles and New York? If not, why not? Or in other words, why do you think cause the distance differences to exist between the Albers and Mercator map projections?

**Question 9.4.** Based upon the Geodesic Mode, what is the distance (in miles) between the two cities for Albers and Mercator maps?

**Question 9.5.** Approximately what is the coordinate units (latitude and longitude) in *decimal degrees* for the northeast corner of Cobb County?

**Question 9.6.** What is the geographic coordinate system (GCS) characteristics of the map data layer (Georgia County layer)? Describe what the angular unit, prime meridian, and spheroid of the data layer.

**Question 9.7.** What is the projection coordinate system (PCS) characteristics of the map data layer (Georgia County layer)? Describe what the linear units, central meridian, and standard parallel of the data layer.

**Question 9.8.** What is the distance (in kilometers) between the two locations on the projected ALBERS map of Georgia?

**Question 9.9.** What is the distance (in kilometers) between the two locations on the projected UTM map of Georgia?

**Question 9.10.** What is the distance (in kilometers) between the two locations on the projected MERCATOR map of Georgia?