Question 12.1: How are the major roads in the county being modeled with raster data?

Question 12.2: How many grid cells does this dataset contain? (*Hint:* The rows and columns are available to you in the Properties.)

Question 12.3: How many square meters does the entire grid cover? (*Hint:* The grid cell size, in meters, is available to you in the Properties.)

Question 12.4: How many zones are in the NLCDmahon raster grid?

Question 12.5: How many cells are in each zone? (That is, how many pixels are in the first zone [11], how many are in the second zone [21]), and so on?)

Question 12.6: Why is the sum total of your answers from Question 12.5 so much lower than your answer to Question 12.2?

Question 12.7: How many regions have been created?

Question 12.8: What land use does the region with the greatest number of grid cells represent?

Question 12.9: How much real-world area does this region take up (in square meters)?

Question 12.10: Redo the regiongroup procedure to create a raster called regionG2, but use the FOUR option for number of neighbors instead. (This means that only grid cells that are contiguous in the four cardinal directions will form a group, instead of in all eight directions.) Find the largest region again. How much real-world area does this new region (computed using the FOUR option instead of EIGHT) take up (in square meters)?

Question 12.11: How closely (in terms of the spatial arrangement) does the raster version of Evans Lake match the vector feature class version?

Question 12.12: How many grid cells does Evans Lake consist of when modeled with 100-m grid cells?

Question 12.13: How does the spatial arrangement of the lakes 100-m grid compare to the vector feature class?

Question 12.14: How many grid cells does Evans Lake consist of when modeled with 10-m grid cells?

Question 12.15: How does the spatial arrangement of the lakes 10-m grid compare to the vector feature class?

Question 12.16: What is the advantage of using the lakes 100-m raster to represent Evans Lake, and what advantage is there to using the lakes 10-m raster to represent Evans Lake?

Step 12.6:
Print a layout or publish a Web map of the final results.