

GEOG 171/2 + EARTH 171/2 LAB 7

Please turn in the following answers in a zipped folder. Your folder should contain maps and a single word document with the non-map answers to the following questions.

1. (5 points) Use the map document ex_8b to create an image showing the *just* the commercial streets of Rapid City. Commercial streets are roads within any commercial land use category. Turn off all other layers. Export your map as a JPEG. No legend, etc., is necessary here. So, just export your map (File->Export Map...) from the Data View. (I will not accept .mxd files. Zero credit will be given for these files. Image MUST be a JPEG.) Name your export "p1.jpg".
2. (5 points) Do exercise #2 on page 302. Do not capture the map. Instead, report the total area of the agriculture/aquifer region. Be sure to include units. (Hint: Remember that geodatabases always update "Shape_Area" fields. Save your output into a geodatabase, like the one you used for the tutorial.)
3. (10 points) What percent of the street/road length *in the city limits of Rapid City* occurs in the "Red Rock Canyon" watershed?
4. (5 points) Do #6 on p. 302. Be sure to create a full-featured map (legend, data source, etc.) Export as a JPEG... and JPEG only! Name the exported map "p4.jpg".
5. (5 points) Do #7 on p. 302. Be sure to create a full-featured map (legend, data source, etc.) Export as a JPEG... and JPEG only! Name the exported map "p5.jpg".
6. (10 points) What operation would you use to split watersheds across the city boundary of Rapid City, including the attributes of Rapid City in the portion of the watersheds that lie within the boundary? How many polygons result from this operation?