Geological Map Lab II

Directions:
This is the 4th and final lab in our series of four geologic structures and map labs. You will need to use many of the concepts and principles in this lab that we learned in previous labs. We have spent several weeks interpreting the subsurface geologic trends of rock units based on their surface expression on a map. Today you will draw a geologic cross-section, illustrating these subsurface geologic trends. First you will need to draw a topographic cross-section, similar to the ones we have drawn in the past. Finally you will need to add in the geology based on the surface contacts and strike and dip symbols shown on the map. Although there may not be a strike and dip symbol directly on the cross-section line, you can use strike and dip symbols in the vicinity of the line to help understand the geology on your cross-section line. In cases where there are no strike and dip symbols at all, you can use your knowledge of contact lines and stream beds or age relationships of strata to help you determine the dip of the beds.

Map: Geologic Map of the Williamsville Quadrangle, Virginia

Draw a geologic cross-section along the red highlighted line running through Shenandoah Mountain.

Map: Geologic Map of Southern Half of Somerset County, PA

Draw a geologic cross-section along the line connecting Springs (79°08’W, 39°44’N) and Silbaugh School (79°17’W, 39°47’N). (IGNORE THE RED LINES ON THIS MAP!)