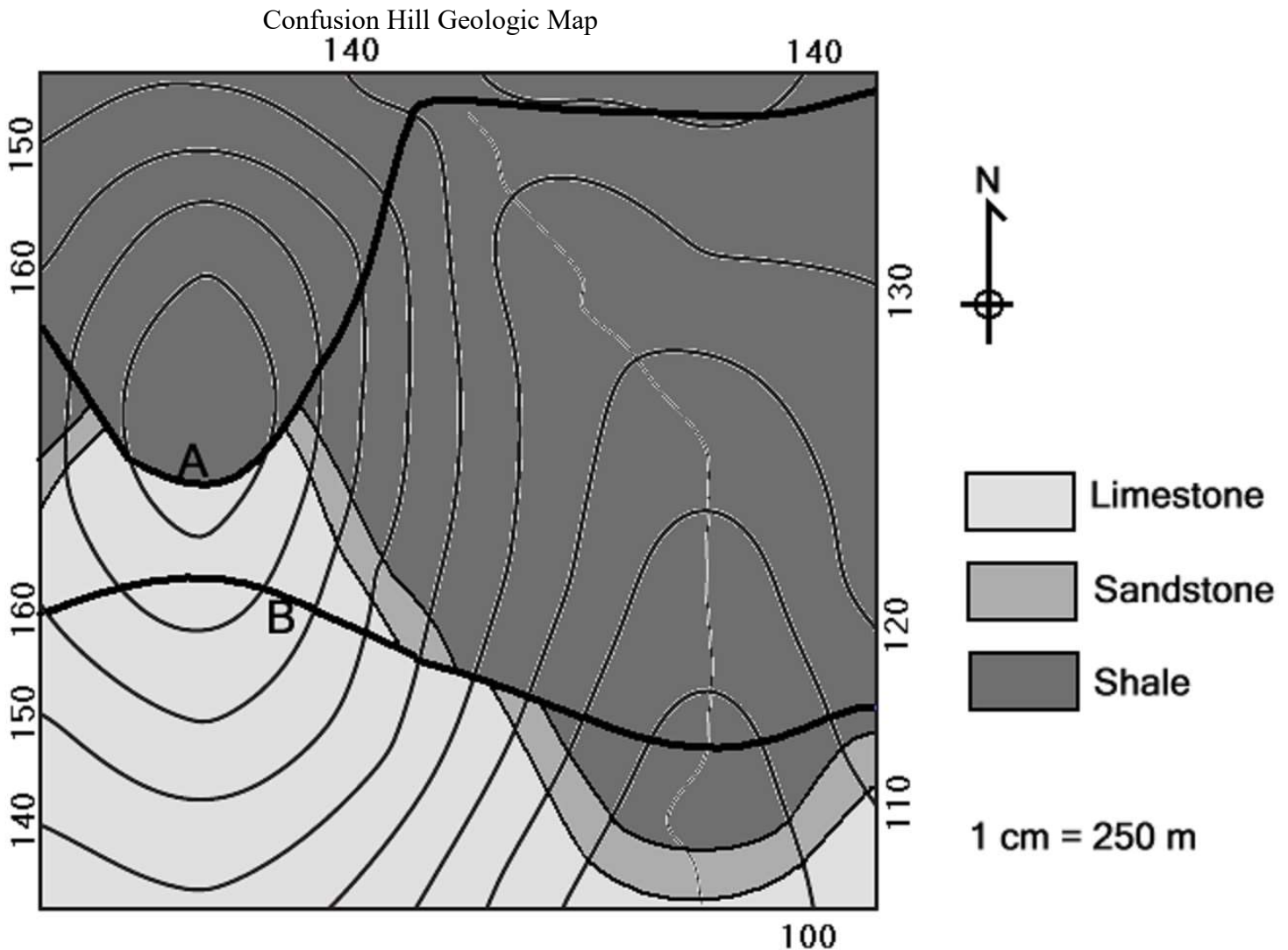


Interpreting Geological Maps with Faults

The following geological map shows a hillside and adjacent river valley. There are three sedimentary rock formations found in the area. These formations are cut by two faults, labelled A and B on the map. For simplicity, assume that all faults and geological formations are flat, but not necessarily horizontal.



Questions

- 1) a) In which direction is the Sandstone Formation dipping?
b) What is the approximate dip angle?
- 2) a) In which direction is fault A dipping?
b) What is the approximate dip angle?
- 3) a) In which direction is fault A dipping?
b) What is the approximate dip angle?
- 4) a) Which side of fault A has moved up relative to the other?
b) Which side of fault B has moved up relative to the other?
- 5) Draw a rough sketch of a cross section running from north to south through the crest of the hill.