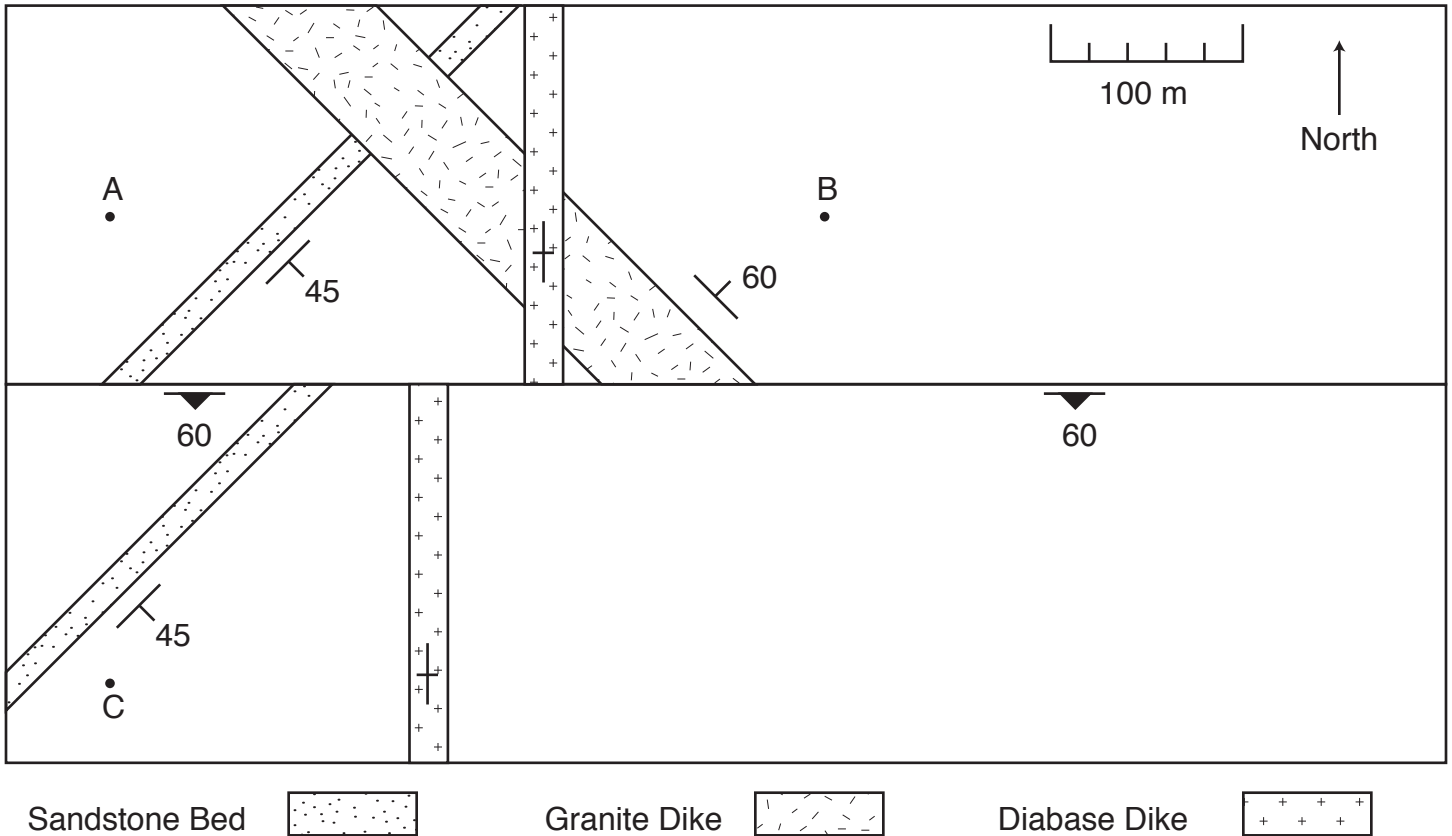


Fault Displacement Problem



A sandstone bed has an attitude of N 45 E, 45 SE. It is cut by a granite dike with an attitude of N 45 W, 60 NE, which is cut in turn by a vertical diabase dike trending N - S. All of these are disrupted further by a fault striking E - W and dipping 60 to the South.

1. What is the strike slip component of the net displacement?
2. What is the dip slip component of the net displacement?
3. What is the magnitude, plunge and bearing of the net displacement?
4. Complete the map by drawing in the granite dike south of the fault.
5. Construct a vertical cross section from A to B.
6. Construct a vertical cross section from A to C.