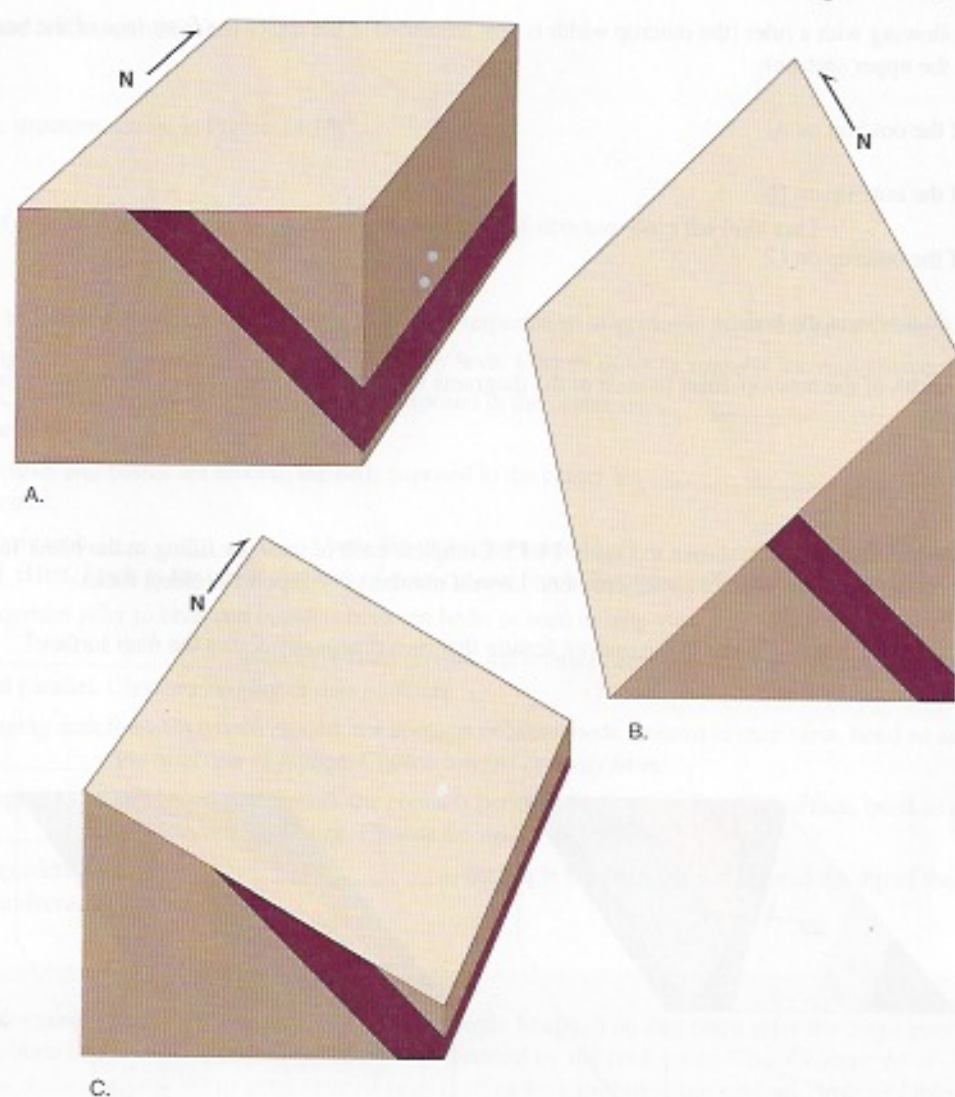


**FIGURE 14.14**

These block diagrams for Problem 5 show a bed dipping at 45°E , but from slightly different perspectives (note north arrows). A. The upper surface is horizontal, so it intersects the bed at 45° . B. The upper surface slopes at 45°W , so it intersects the bed at 90° . C. The upper surface slopes 30°E , so it intersects the bed at 15° .

- (3) Indicate the sense of motion along the fault in Figure 14.13C by putting arrows on the vertical surface. Which is the hanging wall and which the footwall?
- (4) What type of fault is indicated in Figure 14.13C (normal, reverse, thrust, strike-slip)?
5. You may have noticed on the various faces of the cut-out models or on the block diagrams of Figure 14.9 that the width of a given layer changes depending on the angle at which the layer intersects the face. This problem is intended to show you why. The three block diagrams in Figure 14.14 show a north-south-striking bed of the same thickness dipping at 45°E . In addition to being drawn from slightly different perspectives, the diagrams also differ because in A the upper surface is horizontal and intersects the bed at 45° , in B the top surface slopes 45°W so that it intersects the bed at 90° , and in C it slopes 30°E so that it intersects the bed at 15° .
 - a. Complete the upper surface of the diagrams by extending the bed across that surface. The resulting band on the surface represents the outcrop of that bed.