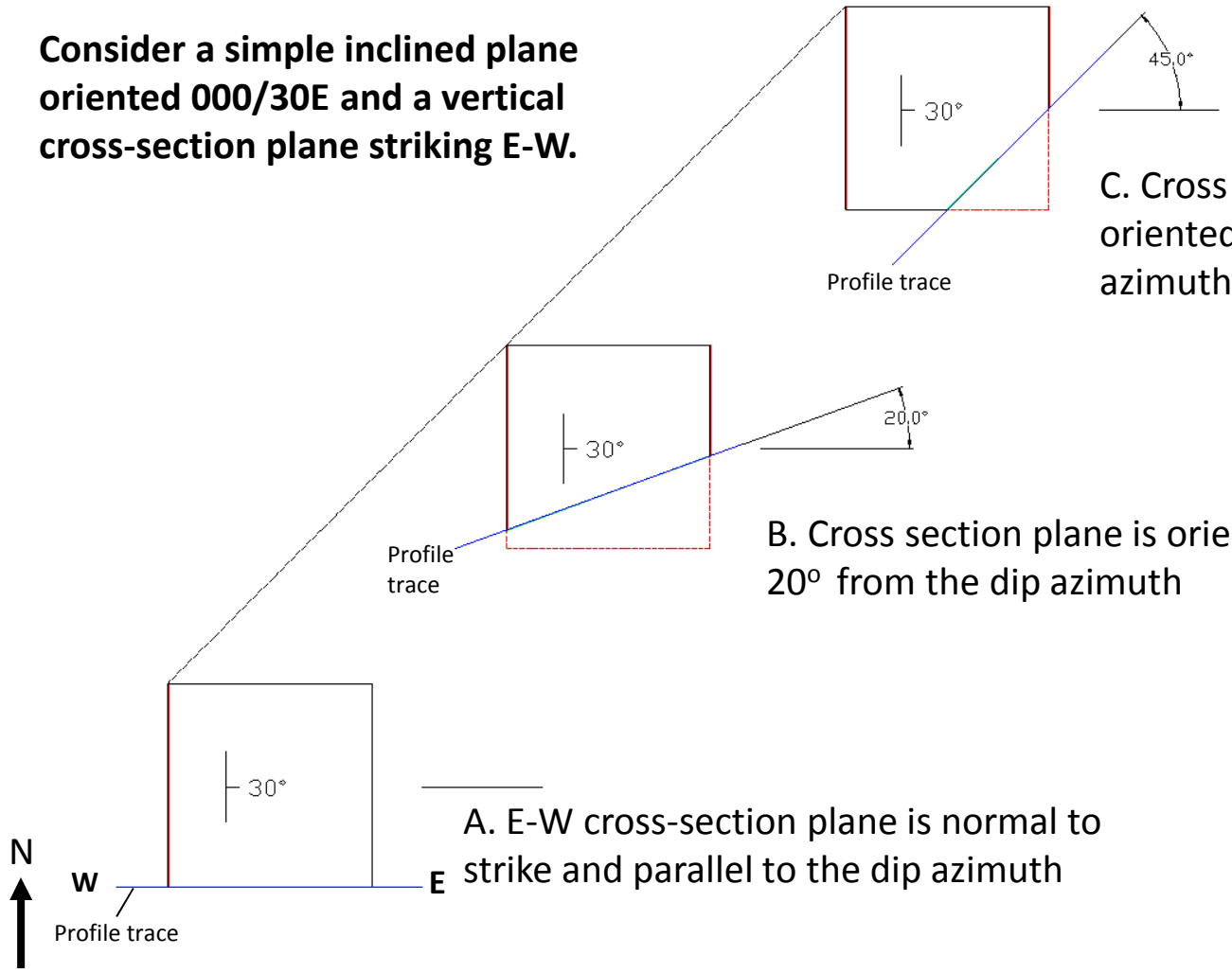
APPARENT DIP OF SIMPLY INCLINED PLANES

Consider a simple inclined plane oriented 000/30E and a vertical cross-section plane striking E-W.



C. Cross section plane is oriented 45° from the dip azimuth

B. Cross section plane is oriented 20° from the dip azimuth

A. E-W cross-section plane is normal to strike and parallel to the dip azimuth

A. Because the plane of cross section is parallel to the dip azimuth, the plane dips in profile at its true value of 30°. Also notice that the trace of the dipping plane in the plane of section that is parallel to strike is horizontal.

B. and C. For the cross section planes oriented 20° and 45° relative to the dip azimuth, the plane has an apparent dip less than the true dip:

APPARENT DIP (λ) = ATAN ((TAN (DIP) * COS (α)) where ATAN=1/TAN or TAN^{-1}

where α = the angle between the dip azimuth and the profile trace