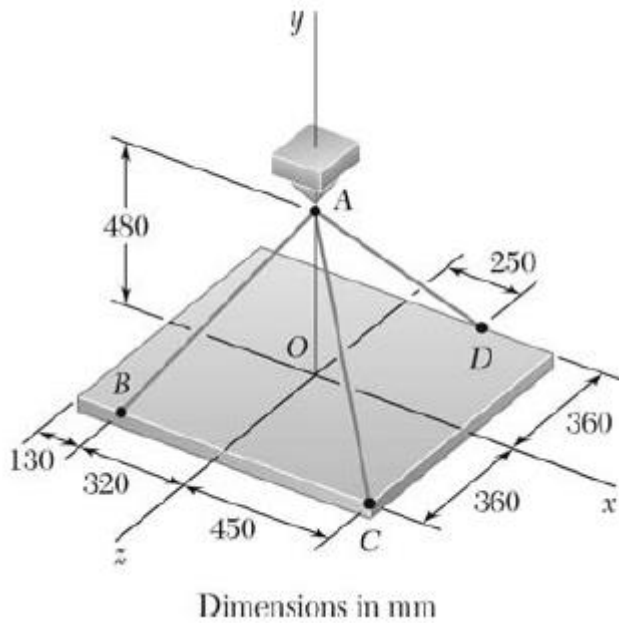


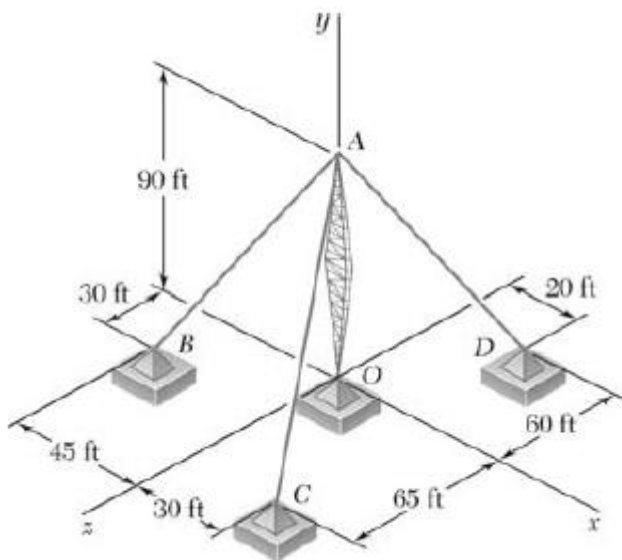
1.

A rectangular plate is supported by three cables as shown. Knowing that the tension in cable AC is 60 N , determine the weight of the plate.



2.

A transmission tower is held by three guy wires attached to a pin at A and anchored by bolts at B , C , and D . If the tension in wire AB is 630 lb , determine the vertical force \mathbf{P} exerted by the tower on the pin at A .



3.

Determine (a) the x , y , and z components of the 900-N force, (b) the angles θ_x , θ_y , and θ_z that the force forms with the coordinate axes.

