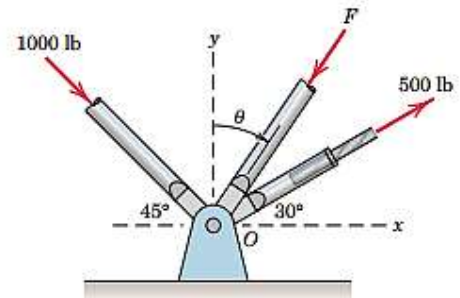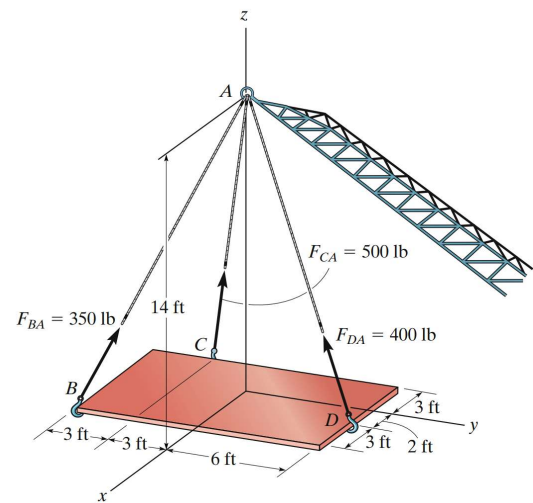## Force in 2D and 3D

Problem 1:

Two rods and one cable are attached to the support at O (Fig.1). If two of the forces are as shown, determine the magnitude F and direction of the third force so that the resultant of the three forces is vertically downward with a magnitude of 1200 lb

Problem 2:

The plate is suspended using the three cables which exert the forces shown. Express each force as a Cartesian vector.

Problem 3:

Express each of the forces in Cartesian vector form and determine the magnitude and coordinate direction angles of the resultant force.