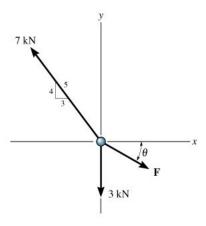
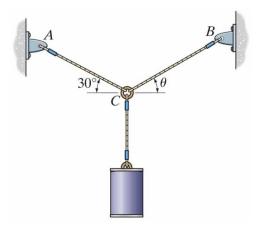


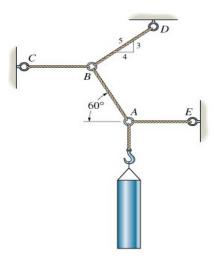
Determine the magnitude of F<sub>1</sub> and angle theta so that particle P is in equilibrium.



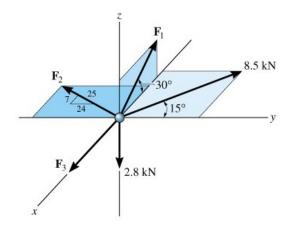
Determine the magnitude of F and the direction angle theta so that the particle is in equilibrium.



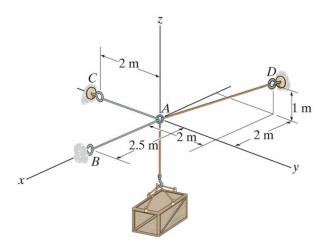
If the cable CB is subjected to a tension that is twice that of cable CA, determine the angle  $\Theta$  for equilibrium of the 10 kg cylinder. Also, what are the tensions in wires CA and CB?



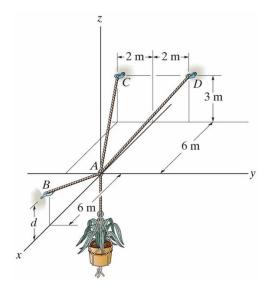
The 30kg pipe is supported at A by a system of five cords. Determine the force in each cord for equilibrium.



Determine the magnitudes of the unknown forces F1, F2, and F3 for equilibrium. F1 lies in the x-z plane, F2 lies in the x-y plane, and the 8.5 KN force is in the x-y plane.



Determine the tension in the cables in order to support the 100 kg crate in the equilibrium position shown.



The 50 kg pot is supported from A by the three cables. Determine the force acting in each cable for equilibrium. Take d=2.5 m.