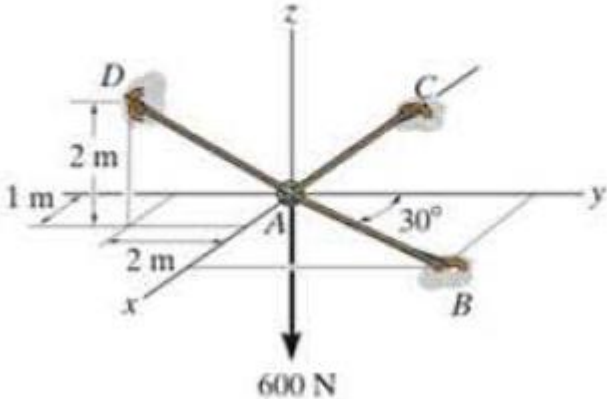
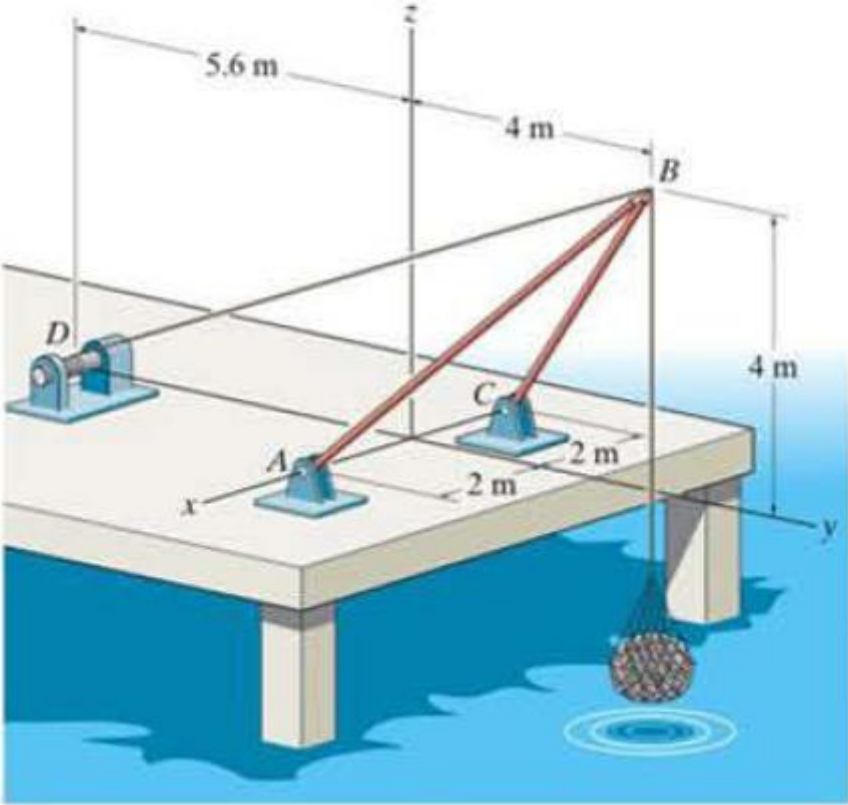


CHAPTER III EQUILIBRIUM OF A PARTICLE

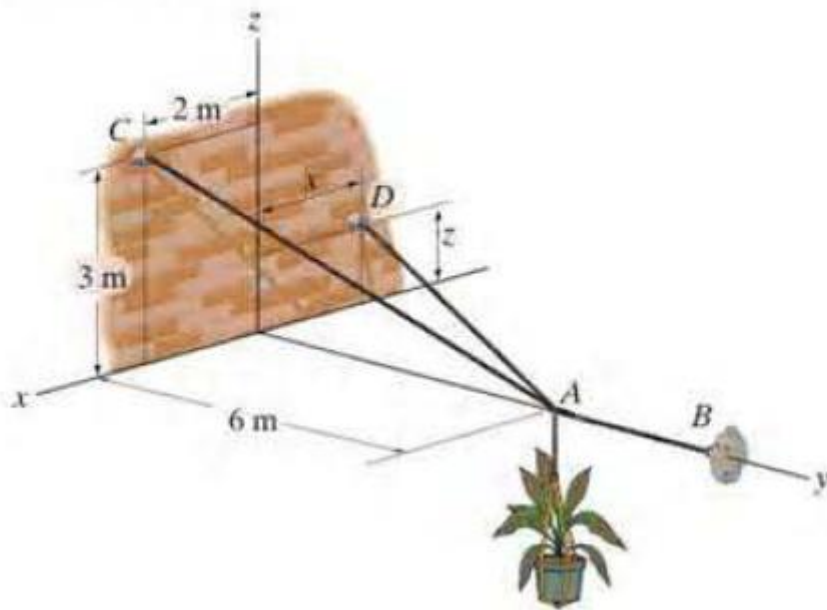
F3-9. Determine the tension developed in cables AB , AC , and AD .



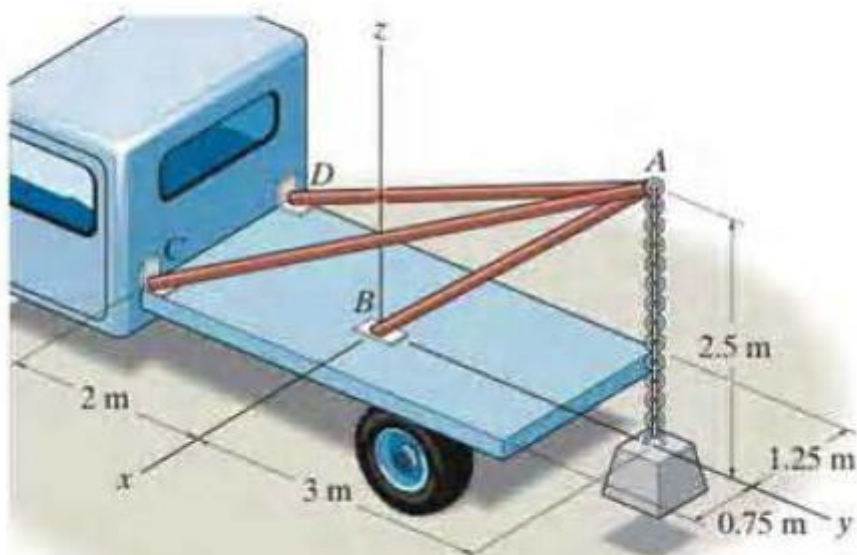
3-47. The shear leg derrick is used to haul the 200-kg net of fish onto the dock. Determine the compressive force along each of the legs AB and CB and the tension in the winch cable DB . Assume the force in each leg acts along its axis.



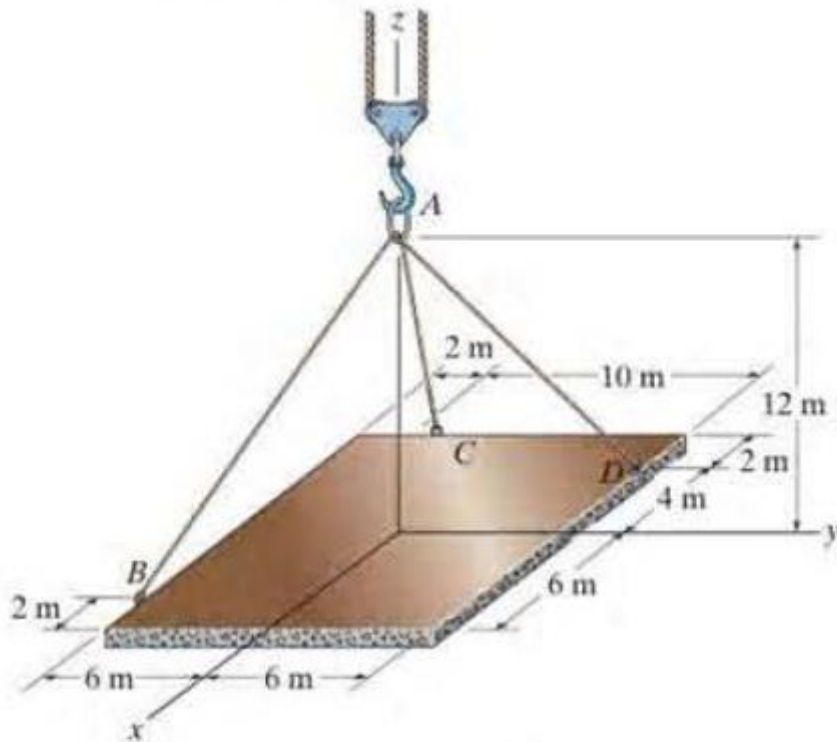
3-55. If the mass of the flowerpot is 50 kg, determine the tension developed in each wire for equilibrium. Set $x = 2$ m and $z = 1.5$ m.



•3-53. Determine the force acting along the axis of each of the three struts needed to support the 500-kg block.



- 3-57. The ends of the three cables are attached to a ring at A and to the edge of the uniform plate. Determine the largest mass the plate can have if each cable can support a maximum tension of 15 kN.



- 3-59. If each cable can withstand a maximum tension of 1000 N, determine the largest mass of the cylinder for equilibrium.

