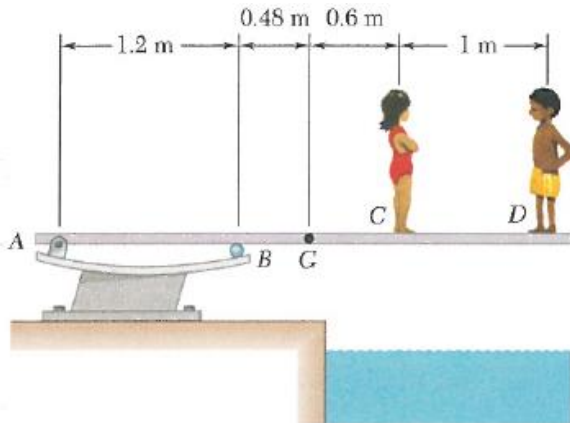


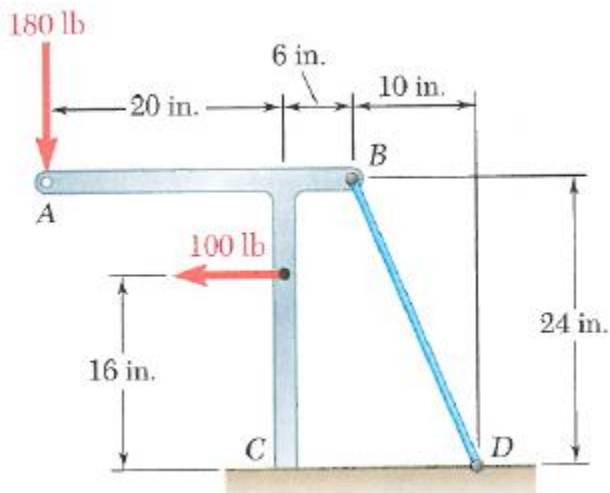
HOMEWORK 4

Q1)



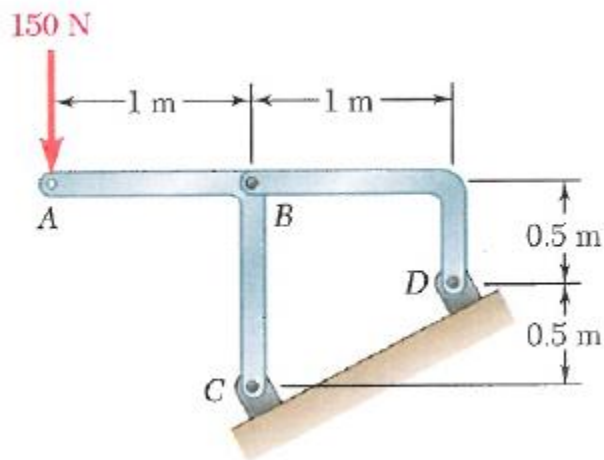
Two children are standing on a diving board of mass 65 kg. Knowing that the masses of the children at C and D are 28 kg and 40 kg, respectively, determine (a) the reaction at A, (b) the reaction at B.

Q2)



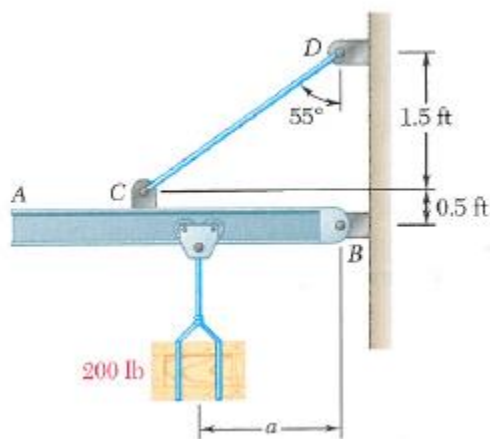
Knowing that the tension in wire BD is 300 lb, determine the reaction at fixed support C for the frame shown.

Q3)



For the frame and loading shown, determine the reactions at C and D.

Q4)



A 200-lb crate is attached to trolley-beam system shown. Knowing that $a=1.5$ ft, determine (a) the tension in cable CD, (b) the reaction at B.