Problem 1 Determine all forces acting on member *ABCD* of the frame shown.

Strategy

Use FBD #	and Equilibrium Equation	to find:

Problem 2 A 70 kg worker stands at C on the step stool shown. Half the workers weight is carried by the legs shown. Determine the components of the force exerted at E on leg BE, assuming that the bottom of the legs is not quite parallel with the floor and that bearing occurs only at points A and B. Neglect the weight of the stool, and assume the floor is frictionless.

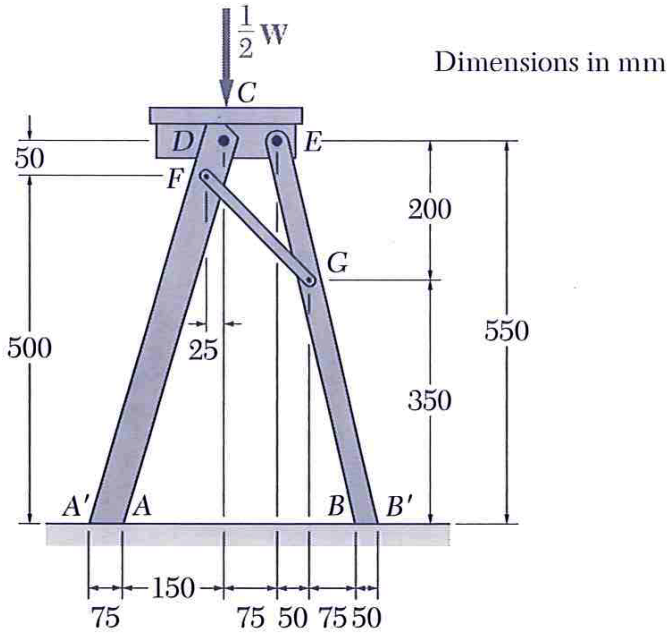Note this problem can be solved with two FBD's and two equations.

Problem 3   A pair of 20-lb. forces is applied to the handles of the small eyelet squeezer. The block at A slides with negligible friction in a slot machined in the lower part of the tool. Neglect the small force of the light return spring *AE* and determine the compressive force *P* applied to the eyelet.