

Practice Problem Set 4: Engineering Mechanics (NMEC101)
Analysis of Structures (Part 2)

Instruction: Figure numbers correspond to the problem numbers.

1. Knowing that the pulley has a radius of 60 mm, determine the components of the reactions at *A* and *E*.
2. Knowing that the pulley has a radius of 75 mm, determine the components of the reactions at *A* and *B*.
3. For the frame and loading shown, determine the components of all forces acting on member *GBEH*.
4. The frame shown consists of members *ABCD* and *EFGH* and two links that connect the two members. Determine the force in links *BF* and *DG* for the given loading.

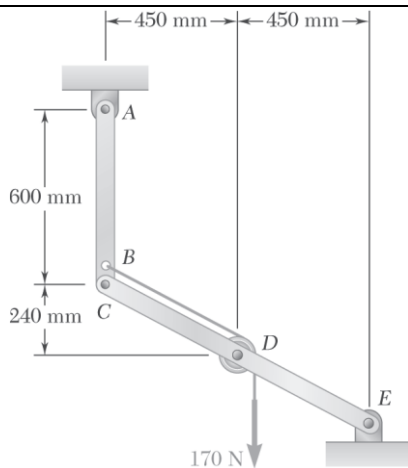


Fig. 1

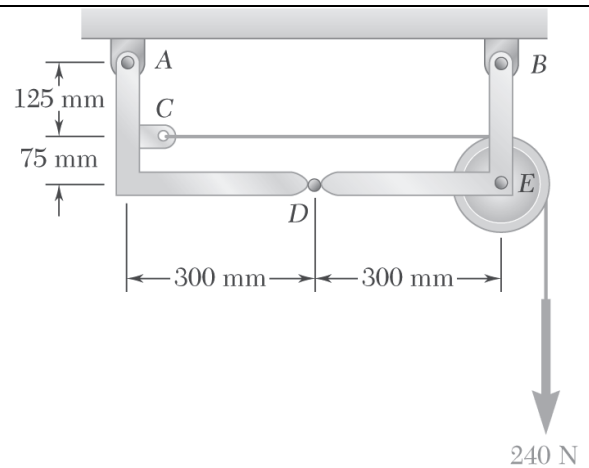
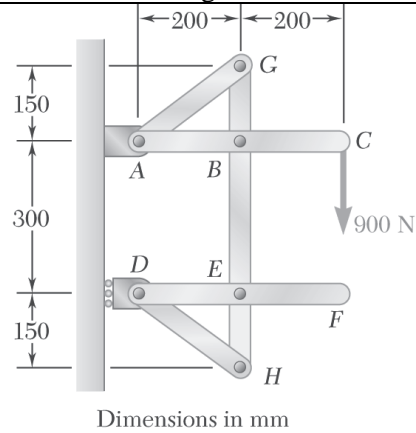


Fig. 2



Dimensions in mm

Fig. 3

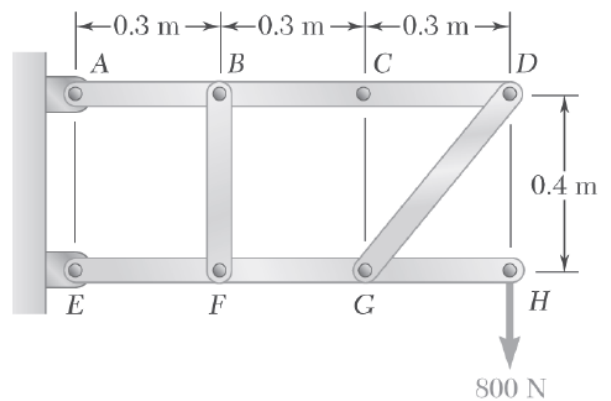


Fig. 4