

King Fahd University of Petroleum & Minerals
CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS (Section 8)
 Second Semester 1424-25 / 2004 (032)

H.W. # 8

Due on Sunday 21-2-1425 / 11-4-2004 (**any time**)

Deadline for submission: Monday 22-2-1425 / 12-4-2004 (**before you sit in class**)

- 1- In Fig. P1 below, the 30-kg uniform pipe cover is held in a horizontal position by the cable CD. Assuming that the bearings are properly aligned and the one at B does not exert any axial thrust, determine all reactions. [Secs. 5.5, 5.6] (25 pts.)
- 2-* Solve problem 5-87 (p. 252) in the textbook, but let the 4-ft dimension be 5 ft and the 6-ft dimension be 7 ft. [Secs. 5.5, 5.6] (25 pts.)
- 3-* Solve problem 6-18 (p. 271) in the textbook, but let each of the 300-lb forces be 200 lb. [Secs. 5.1 - 5.4] (20 pts.)
- 4- Using the method of **joints**, determine the force in each member of the truss shown in Fig. P4 below. State whether each member is in *tension* or *compression*. [Secs. 6.1, 6.2] (20 pts.)
- 5- Determine all *zero-force members* in the truss shown in Fig. P5 below. [Sec. 6.3] (10 pts.)

* You can discuss the solutions of these problems with your colleagues or other students, but **at the end you have to solve and understand them yourself**. You have to do the other problems by yourself only. *Of course you can seek my help anytime in the homework and in anything else.*

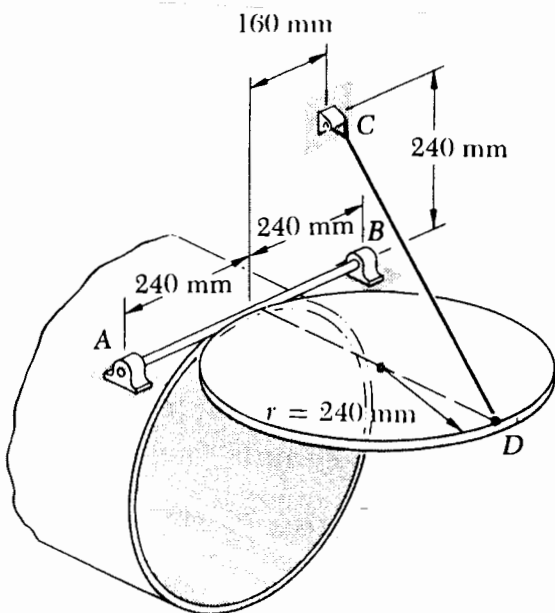


Fig. P1

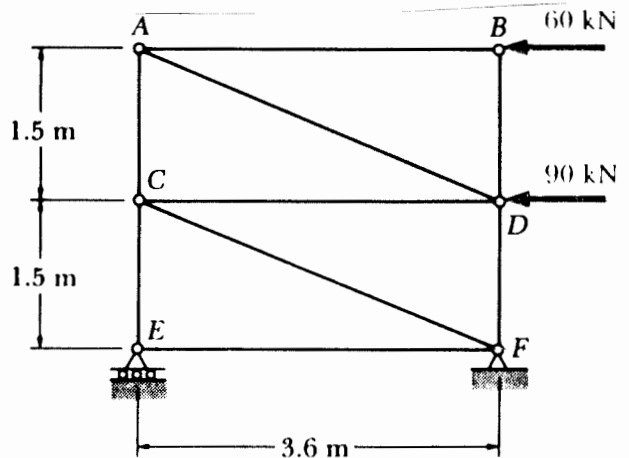


Fig. P4

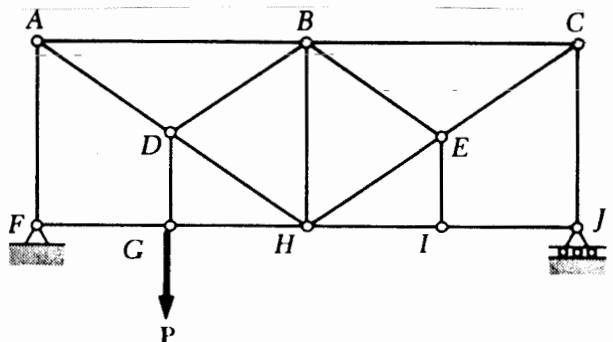


Fig. P5

Review the guidelines for submitting homework assignments given to you in class BEFORE you start solving and writing the homework. DO NOT SUBMIT THE HOMEWORK IF YOU DO NOT FOLLOW THESE GUIDELINES. Cheating, copying, etc. is!!!!!!