

King Fahd University of Petroleum & Minerals
CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS (Sections 3 & 4)

First Semester 1430-31 / 2009-10 (091)

H.W. # 11

Due on Sunday 24-1-1431 / 10-1-2010 (any time)

Deadline for submission: **Monday 25-1-1431 / 11-1-2010 (before you sit in class)**

- 1- In Fig. P1 shown, determine the internal forces at B and C . [Sec. 7.1] (15 pts.)
- 2- In Fig. P2 shown, determine the internal forces at C . $\mathbf{F}_1 = \{350 \mathbf{i} - 400 \mathbf{j}\}$ lb and $\mathbf{F}_2 = \{-300 \mathbf{j} + 150 \mathbf{k}\}$ lb. [Sec. 7.1] (15 pts.)
- 3- For the beam shown in Fig. P3, determine the equations and draw the diagrams for the shear force and bending moment. *Be sure to put the values (of the points) on the diagrams.* [Sec. 7.2] (15 pts.)
- 4- For the beam shown in Fig. P4, determine the equations and draw the shear force and bending moment diagrams. *Be sure to put the values (of the points) on the diagrams.* [Sec. 7.2] (20 pts.)
- 5- For the beam shown in Fig. P5, determine the equations and draw the diagrams for the shear force and bending moment. *Be sure to put the values (of the points) on the diagrams.* [Sec. 7.2] (35 pts.)

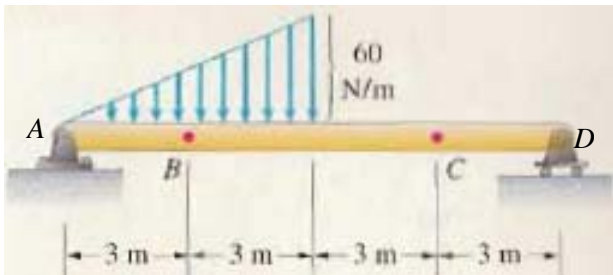


Fig. P1

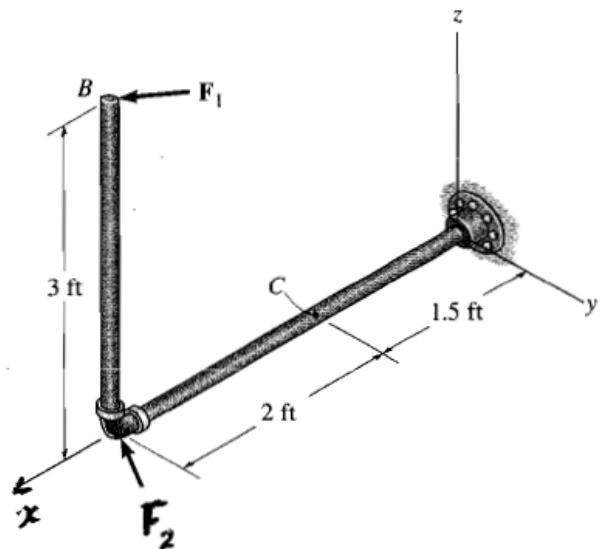


Fig. P2

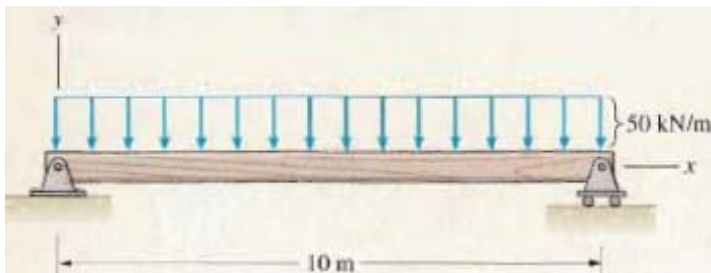


Fig. P3

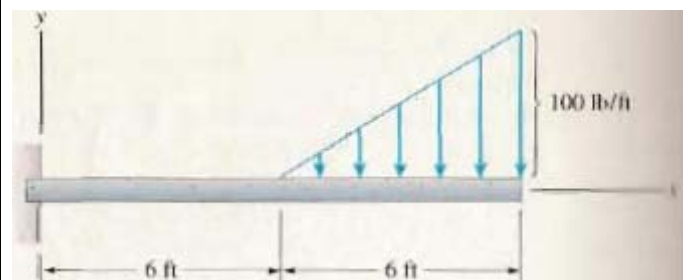


Fig. P4

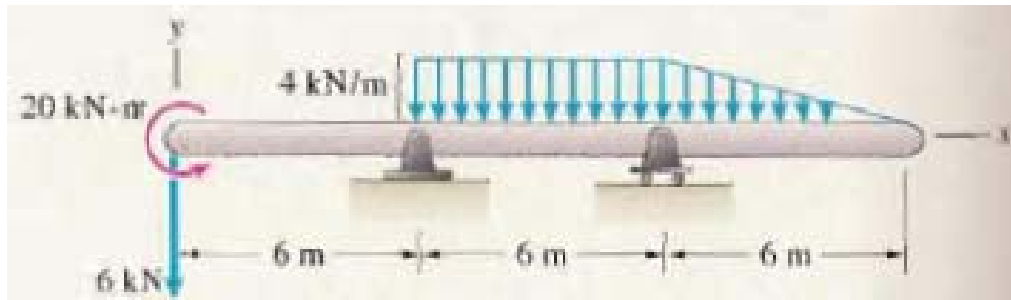


Fig. P5

Do your work yourself!! Remember that the homework carries more than 10% of the course grade; in addition, *solving it is the best way to understand the subject.* Of course, you can seek my help anytime in the homework as well as in anything else.

As an engineer, review the guidelines for submitting homework assignments given to you in class **BEFORE** you start solving and writing the homework. FOLLOW ALL THESE GUIDELINES. Cheating, copying, etc. is!!!!!!