

King Fahd University of Petroleum & Minerals
CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS (Sections 4 & 5)

First Semester 1428-29 / 2007-08 (071)

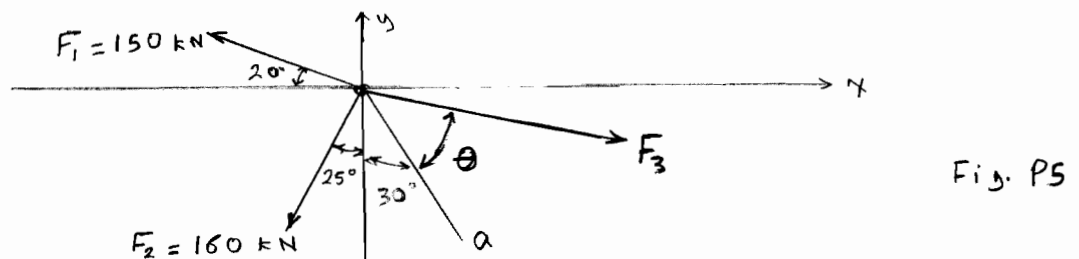
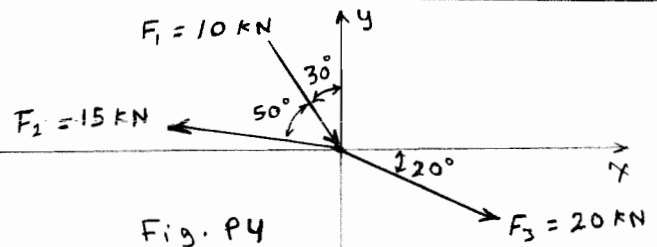
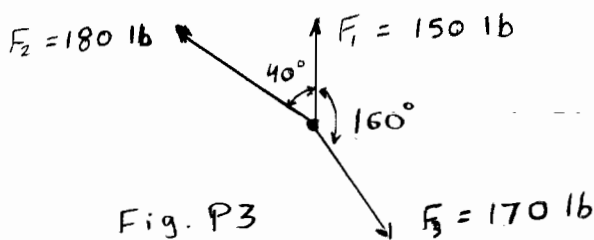
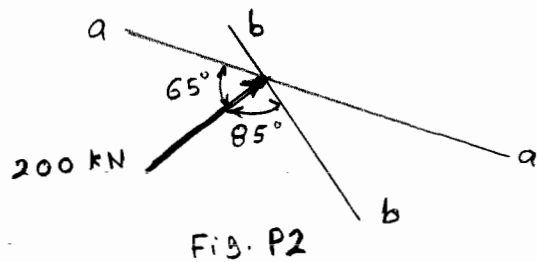
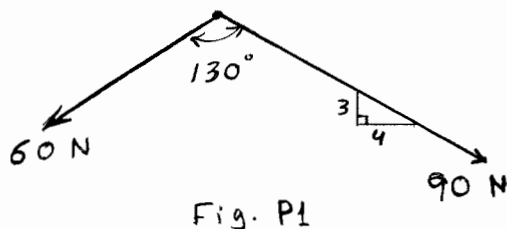
H.W. # 1

Due on Sunday 4-9-1428 / 16-9-2007 (any time)

Deadline for submission: **Monday 5-9-1428 / 17-9-2007 (before you sit in class)**

- 1-* Determine the value and direction of the resultant of the two forces shown in Fig. P1 below. [Sec. 2.3] (15 pts.)
- 2-* Resolve the force shown in Fig. P2 below into two components acting along the lines *aa* and *bb*. [Sec. 2.3] (15 pts.)
- 3-* Determine the magnitude and direction of the resultant of the three forces shown in Fig. P3 below. [Sec. 2.3] (25 pts.)
- 4- Determine the magnitude and direction of the resultant of the three forces shown in Fig. P4 below. [Sec. 2.4] (20 pts.)
- 5- Determine the magnitude and direction of F_3 shown in Fig. P5 so that the resultant of the three forces is directed along the *a* axis and has a magnitude of 100 kN. [Sec. 2.4] (25 pts.)

***Note:** Use the method of Section 2.3 to solve problems 1, 2, and 3. **DO NOT use Cartesian vectors;** no credit will be given if you use them.



Do your work yourself!! Remember that the homework carries 20% 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. **DO NOT SUBMIT THE HOMEWORK IF YOU DO NOT FOLLOW THESE GUIDELINES.** Cheating, copying, etc. is!!!!!!