

King Fahd University of Petroleum & Minerals  
CIVIL ENGINEERING DEPARTMENT

CE 201 STATICS (Section 9)  
First Semester 1427-28 / 2006-07 (061)

H.W. # 1

**Due** on Sunday 24-8-1427 / 17-9-2006 (any time)

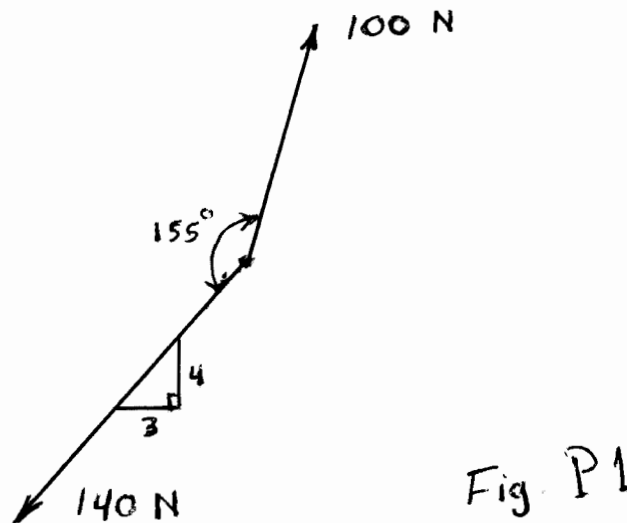
**Deadline** for submission: Monday 25-8-1427 / 18-9-2006 (**before you sit in class**)

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- 1-\* Determine the value and direction of the resultant of the two forces shown in Fig. P1 below. [Sec. 2.3] (15 pts.)
  - 2-\* Solve problem 2-11 (p.27) in the textbook, but let the  $60^\circ$  angle be  $35^\circ$  and  $F = 70$  lb. [Sec. 2.3] (15 pts.)
  - 3-\* Solve problem 2-23 (p.29) in the textbook, but let the 50-N force be 40 N and the  $20^\circ$  angle be  $30^\circ$ . [Sec. 2.3] (25 pts.)
  - 4- Solve problem 2-38 (p.39) in the textbook, but let the  $30^\circ$  angle be  $15^\circ$  and  $F_1 = 700$  N. [Sec. 2.4] (20 pts.)
  - 5- Solve problem 2-56 (p.42) in the textbook, but let  $F_1 = 70$  lb the  $25^\circ$  angle be  $15^\circ$ . [Sec. 2.4] (25 pts.)

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**\*Note:** Use the method of **Section 2.3** to solve these problems. **DO NOT use Cartesian vectors**; no credit will be given if you use them.

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**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.

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**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 .....!!!!!!