King Fahd University of Petroleum & Minerals
**CIVIL ENGINEERING DEPARTMENT**

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

**H.W. # 1**

**Due** on Sunday 2-1-1425 / 22-2-2004 **(any time)**

**Deadline** for submission: Monday 3-1-1425 / 23-2-2004 (**before you sit in class**)

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1- Determine the resultant of the two forces shown in Fig. P1 below. [Sec. 2.3] (20 pts.)

2- Solve problem 2-5 (p.26) in the textbook, but let the 45° angle be 55° and $F_1$ = 300 N. [Sec. 2.3] (20 pts.)

3- Solve problem 2-18 (p.28) in the textbook, but let the 500-N force be 400 N. [Sec. 2.3] (20 pts.)

4-* Solve problem 2-21 (p.29) in the textbook, but let the resultant force be 800 N. [Sec. 2.3] (20 pts.)

5-* Solve problem 2-137 (p.78) in the textbook, but let $F_1$ = 90 N. [Sec. 2.3] (20 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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* 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.*

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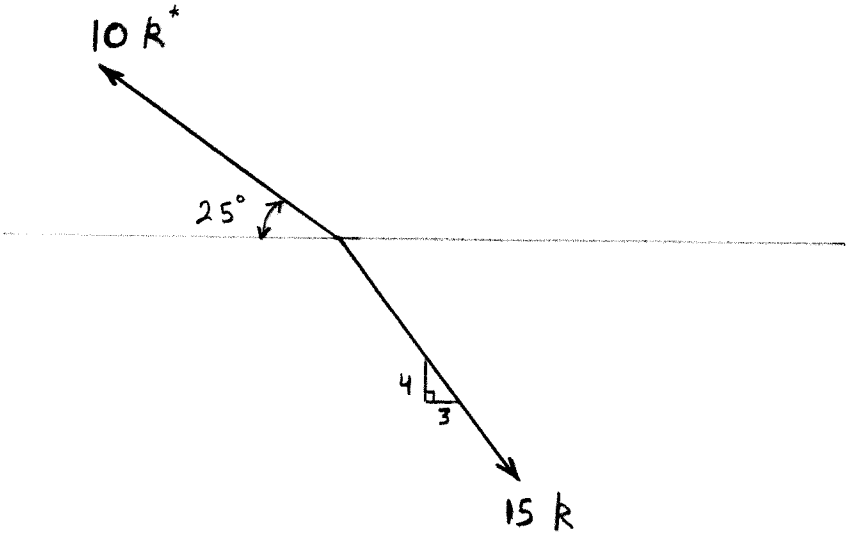


Fig. P1

*k = kip = 1000 lb (pound)

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**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.**