

CONCORDIA UNIVERSITY
FACULTY OF ENGINEERING AND
COMPUTER SCIENCE
DEPARTMENT OF MECHANICAL AND
INDUSTRIAL ENGINEERING

ENGR 242/T Statics

Time 70 minutes

Date: October 30, 2002

Instructors: Dargahi

Family Name:

First Name:

ID:

All questions have equal marks.

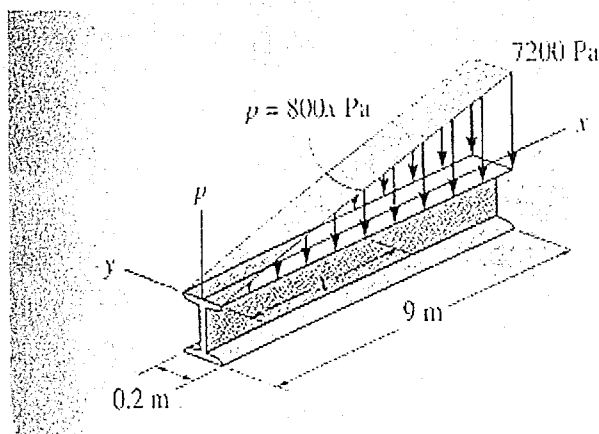
Question # 1.....

Question # 2.....

Question # 3.....

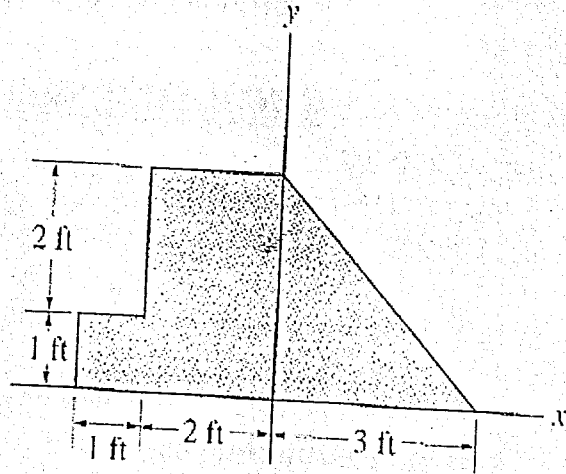
Question1

A distributed loading of $p = 800x$ Pa over the top surface of the beam shown below. Determine the magnitude and location of the equivalent resultant force.



Question2

Locate the centroid of the plate area shown below.



Question3

The link shown below is pin-connected at A and rests against a smooth support at B. Compute the horizontal and vertical components of reaction at the pin A.

