

CE383 STRUCTURAL ANALYSIS

FALL 2013 – 2014

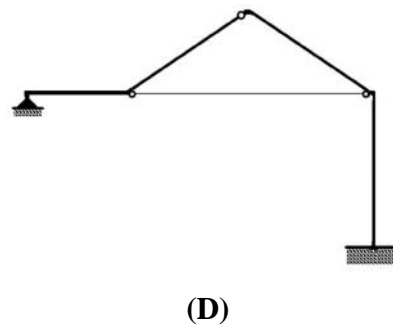
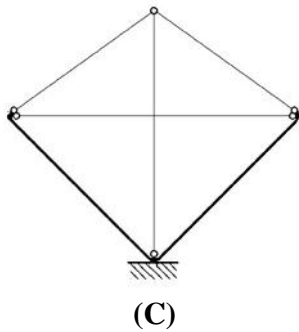
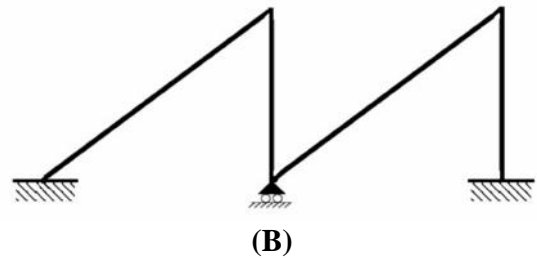
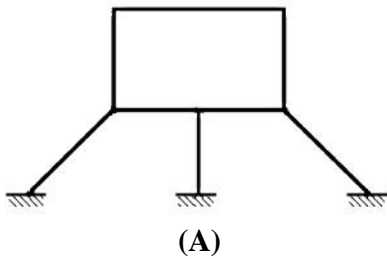
HOMEWORK 1

DUE: 28.10.2013 @ 13.00

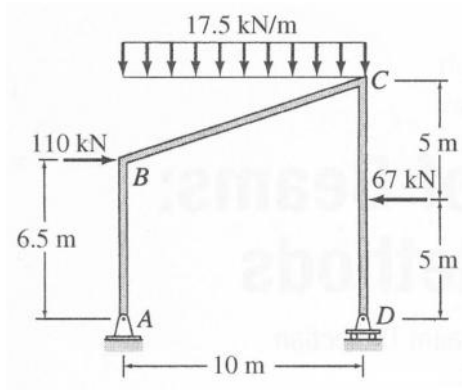
Homework assignments submitted past the deadline will be accepted subject to a 20% deduction per day.

IMPORTANT NOTE: Homework papers will be submitted with all sheets binded together by stapling the upper left corner. Do not use sheet protectors (po et dosya). Write both your ID number and full name. Homeworks that are not compatible with this format will be penalized.

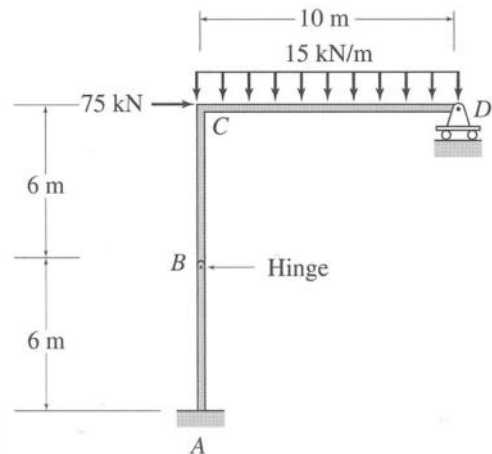
Q1) For the following structures, determine the degree of static indeterminacy (D_T) by clearly showing your calculations (don't just guess a number).



Q2) For the following statically determinate structures, determine the support reactions and plot the internal force diagrams (shear, moment and normal force). **Clearly indicate your sign convention and show all critical values on the diagrams.**



(A)



(B)

Q3) For the given structure, determine the support reactions and the force in the tie bar, and furthermore draw the moment diagram and show all critical values (there is moment release at E). **Clearly indicate your sign convention.**

