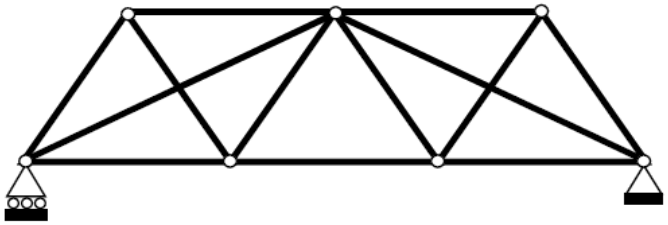
CE 317 **STRUCTURAL MECHANICS II** Autumn 2009

Tutorial Sheet #1

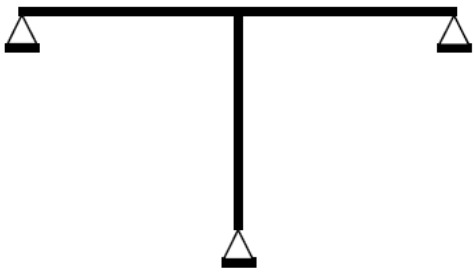
Assigned on Thursday, July 30

1. Find the **degree of kinematic indeterminacy** (and also the **degree of static indeterminacy**) for the following structures. For (e), (f) & (g) find these degrees with all the beams being i) axially deformable, and ii) axially rigid.

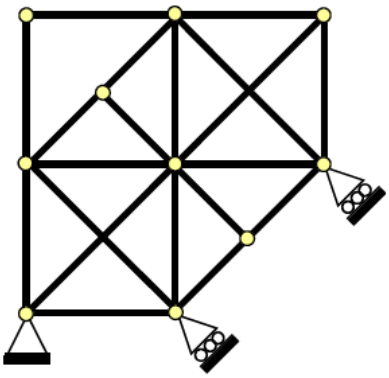


(a)

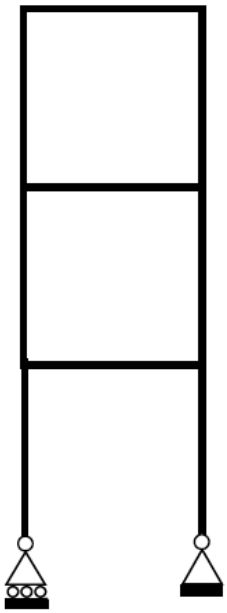
(b)



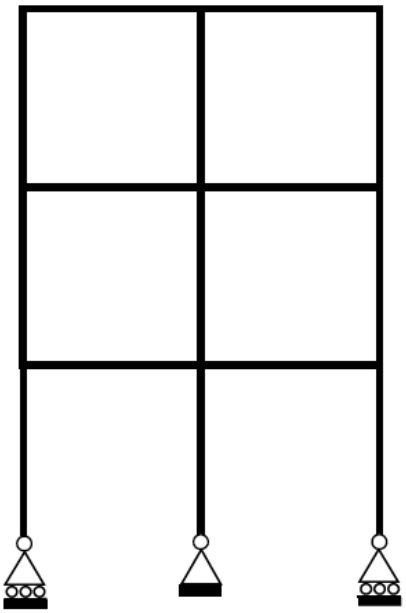
(c)



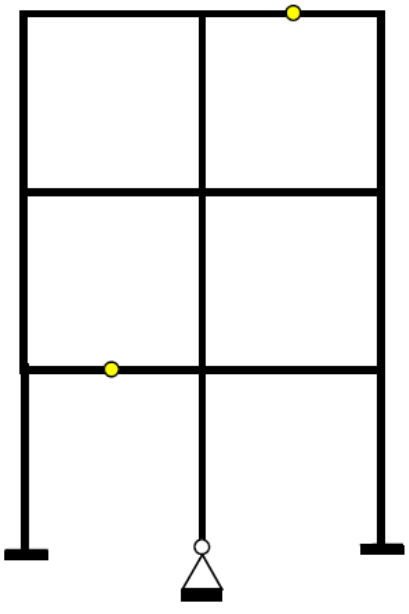
(d)



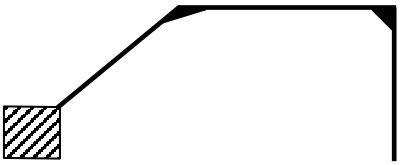
(e)



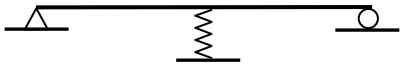
(f)



(g)



(h)



(i)

2. For the following 2D beam member, a) draw **free body diagrams** for parts *AB* and *BC*, and b) write all the **compatibility conditions** at joints *A*, *B* and *C*.