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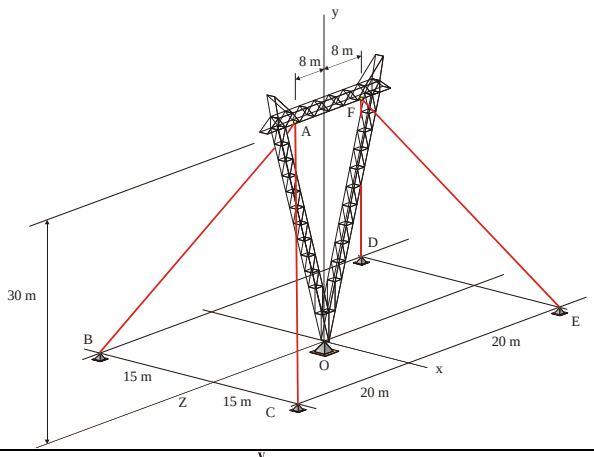
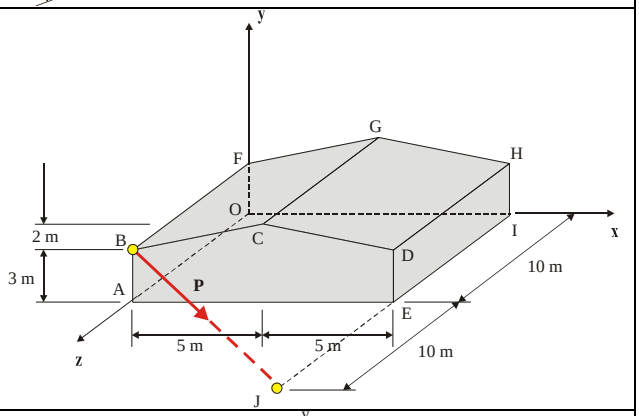
NAME:_____Student #_____ GROUP:_____

ENG 1440 Assignment #11

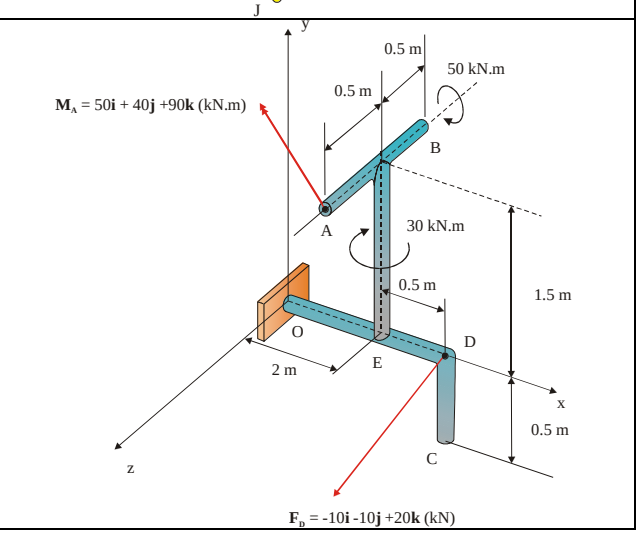
1. For the transmission tower shown, determine:
   (a) The angle between wires AB and AC.
   (b) The component of the 2800 N tension exerted by guy AB at point A on guy AC.



2. A force **P** of 3900 N acts on the building shown at point B. Determine the moment of **P** about:
   (a) the point I,
   (b) about the line joining F and E, and
   (c) about the line joining D and J.



3. Replace the three couples and the force by an equivalent force-couple system at the origin, O.



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BONUS

Replace the system of forces and couples acting on the plate shown by a single force-couple acting at *O*. The magnitude of $\boldsymbol{F_1}$ is *20 kN* and the magnitude of $\boldsymbol{F_2}$ is *12 kN*.