

Name:.....

No.:.....

Birzeit University - Faculty of Engineering

Department of Civil Engineering

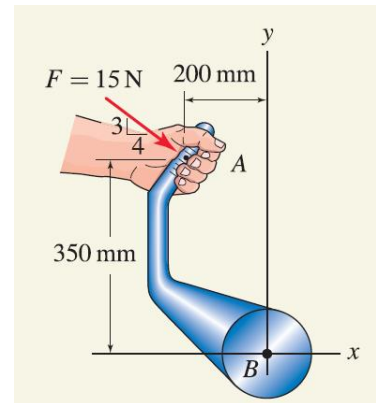
Statics - ENCE232

HW#3: (Submission Deadline – 21/03/2017)

Instructor: *Abdelrahman Hamdan*

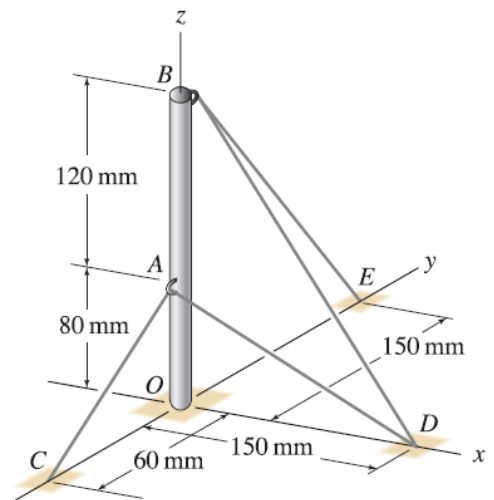
2st Semester 2016/2017

Q1. The force exerted by the hand is 15 N. You are required to determine the moment of the 15 N about point B.

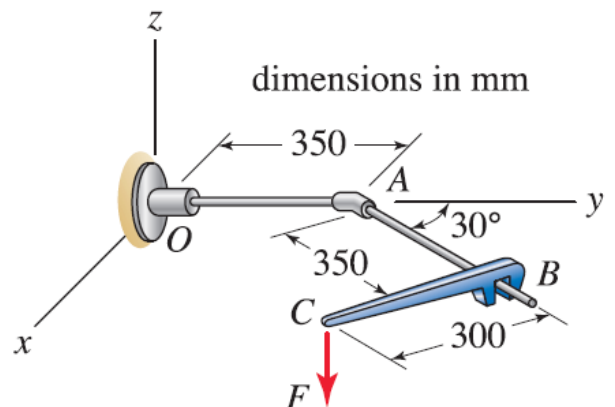


Q2. The column shown is fixed in the ground and supporting cables as shown. Rings at A and B are frictionless. If the magnitudes of the tension in cables BE and CA are 100 N and 250 N, determine:

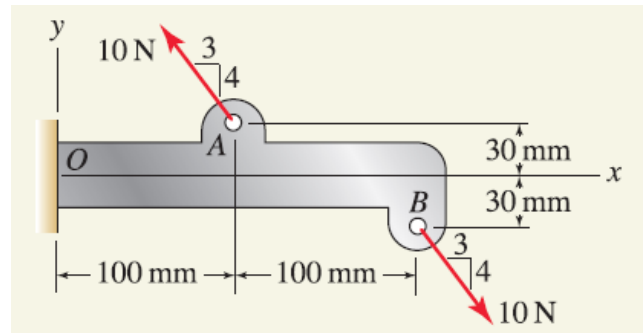
- a. The moment of all forces about point A.
- b. The moment of all forces about point O.



Q3. For the structure shown, determine the moment of the force $F = 150$ N about lines OA and AB.

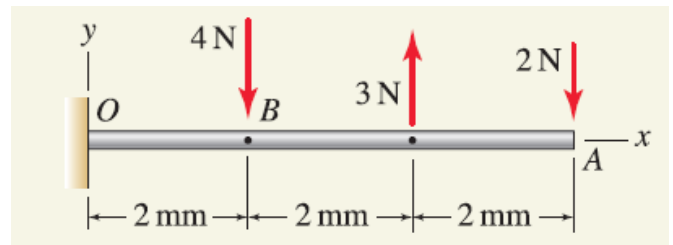


Q4. Determine the moment of the couple shown



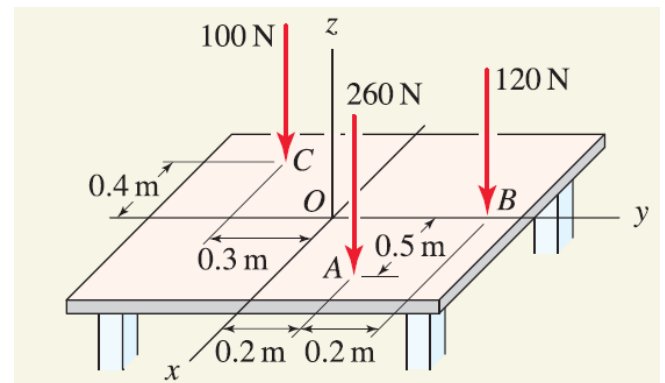
Q5. Determine the equivalent system:

- At A
- At B
- Consisting of single force and determine the point of application of the force.



Q6. For the structure shown;

- Determine the equivalent system at O.
- Determine the equivalent single force and specify its point of application.



Q7. For the system shown, determine the equivalent single force system and its point of application.

