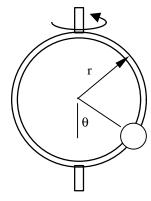
## ROSE-HULMAN INSTITUTE OF TECHNOLOGY

## Department of Mechanical Engineering

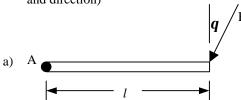
ES 204 Mechanical Systems

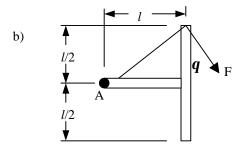
Quiz - Le 06 Name: \_\_\_\_\_

1. A small bead is carried by a circular hoop which rotates about a fixed vertical axis with a constant angular velocity. Equilibrium is achieved when the angle q is equal to 60 degrees. Draw a clearly labeled FBD and KD of the bead at this angle. Assume that the rod is frictionless.

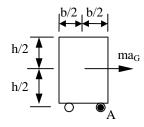


2. For the two cases shown below, what is the moment about point A due to the force F (give the magnitude and direction)





3. For the kinetic diagram shown below, what is the rate of change of the angular momentum about point A?



Quiz Page 1 of 1