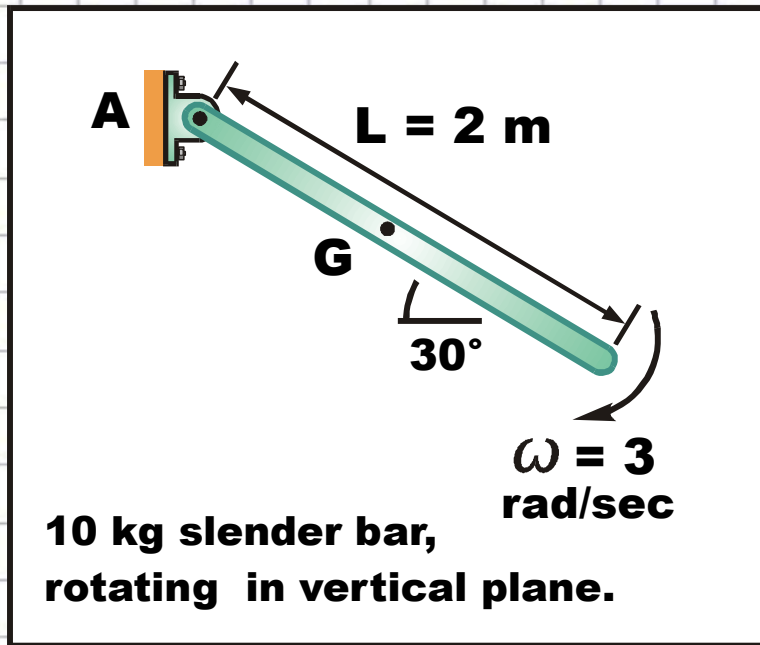
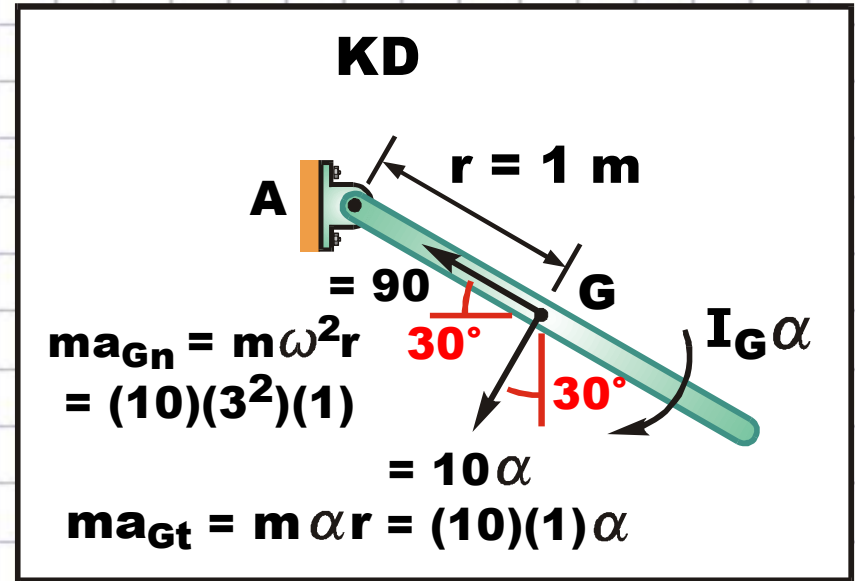
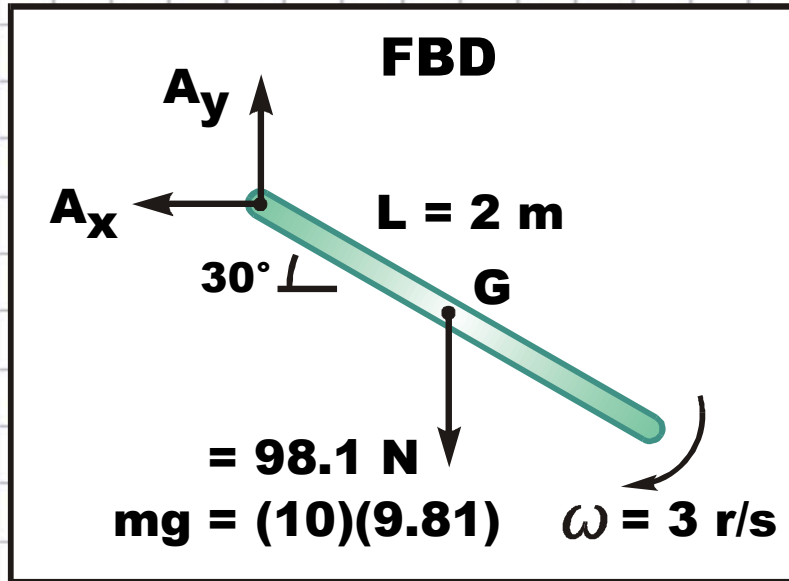


## Rigid Body $F=ma$ Fixed Axis Rotation: Example 4

A 10 kg slender bar rotates in a vertical plane about a fixed pin at A. At the position shown,  $\omega = 3$  rad/sec. Please determine: (a) Angular acceleration,  $\alpha$ , for the bar; (b) Pin reactions at A.



Draw a Free Body Diagram and a Kinetic Diagram:



Write equations of motion:

