1. State one way of finding the CM of an object.

2. For each object label its center of mass with an x and label it CM.



3. Draw a vertical line through the CM and circle any that would topple over.



4. Draw a stable shape and label its CM. Draw an unstable shape and label its CM.



6. Calculate the net Torque.



7. A figure skater goes into a spin. He then pulls his hands inward.

- a) What happens to his Rotational Inertia?
  - $\Box$  Gets larger.  $\Box$  Gets smaller.  $\Box$  Stays the same.
- b) What happens to his Angular Velocity?
  □ Gets larger. □ Gets smaller. □ Stays the same.
- c) What happens to his Angular Momentum?
   □ Gets larger. □ Gets smaller. □ Stays the same.