

2. A steel ball of radius  $r$  is rolling on a frictionless vertical circular track. Its rotational inertia about the center of mass is  $I = amr^2$ , where  $r$  is the radius of the ball. If the ball is released from rest at point A,

- (a) What is its speed at point B at the bottom of the track?
- (b) What is the force of the track on the ball at point B and in which direction does it act?

