Two identical masses are moving with the same center of mass speed on flat ground. Mass $A$ is a solid disk rolling with enough friction to allow rolling but no loss of energy to friction. Mass $B$ can be treated as a point particle on a frictionless surface. If both surfaces suddenly incline upward, which mass will reach the greatest height?

1. Mass A
2. Mass B
3. Both reach the same height
A pendulum swings in a vertical circle. At what point does the tension in the string do the most work?

1. Bottom of the loop
2. Top of the loop
3. The tension does no work
Three students are discussing the concept of work in regards to a situation where a dude is standing at rest holding some books. Which student do you agree with most?

1. “The books aren’t moving so there is no way any work is being done on them.”

2. “That doesn’t make sense because the dudes arms would be getting tired and thus he must be losing energy, if energy is being lost then work must be done on the dude”

3. “The only force connecting the books and that dude are the normal force, so if the books have no work being done on them but the dude does have work being done on him it can’t be due to the normal force from the books.”

4. All are correct statements