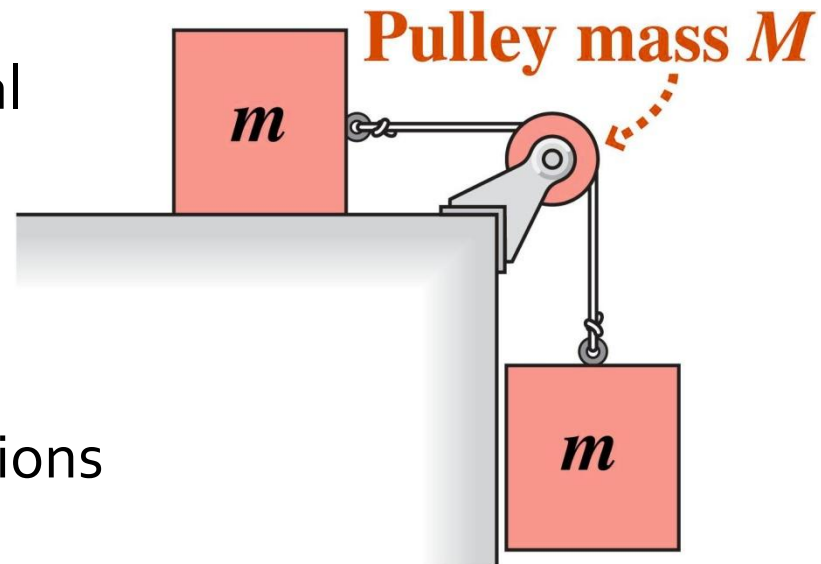


The figure shows two identical masses m connected by a string that passes over a frictionless pulley whose mass is *not* negligible. One mass rests on a frictionless table while the other hangs vertically, as shown. Compare the force of tension in the horizontal and vertical sections of the string.

- A. The tension in the horizontal section is greater.
- B. The tension in the vertical section is greater.
- C. The tensions in the two sections are equal.



A hollow ball and a solid ball roll without slipping, with zero rolling friction, down an inclined plane. Also, there is an ice cube that slides down with no friction. What is the order in which these three objects arrive at the bottom (assuming they are released from the same height)?

- A. Ice cube, Solid ball, Hollow ball
- B. Solid ball, Hollow ball, Ice cube
- C. Ice cube, Hollow ball, Solid ball
- D. All at the same time
- E. We can't determine this without information about the mass.