

Spherical Shell v/s Cylindrical Shell

If a spherical shell ($I = (2/3)mr^2$) and a cylindrical shell ($I = mr^2$) are released from rest at the same instant from the top of a ramp (inclined at a certain angle to the floor), which, would you predict, will reach the bottom first?

- a.) The cylindrical shell.
- b.) The spherical shell.
- c.) Both will reach the bottom at exactly the same time.
- d.) Depends on which object has the greater mass.
- e.) Depends on which object has the greater radius.