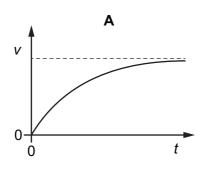
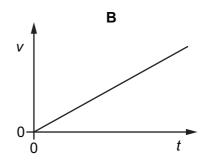
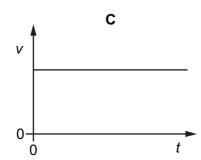
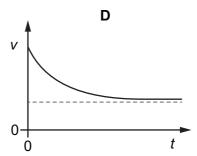
11 A rigid, hollow sphere is immersed deep in water and released from rest. It experiences an upthrust which propels it towards the surface of the water.

Which graph best shows the variation with time *t* of its upward velocity *v*?









12 A flat metal disc has radius *R*.

Forces of magnitude F are applied tangentially at the edge of the disc. The forces are in the plane of the disc.

Which arrangement of forces produces only a torque of magnitude 2FR?

