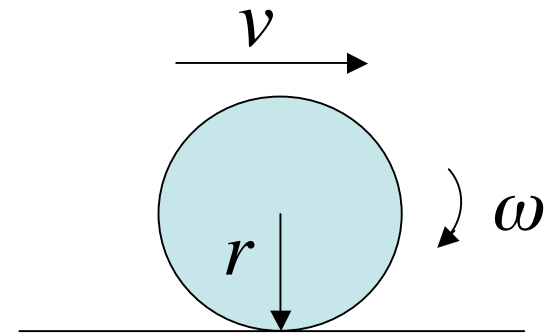


Friction and Rolling

Consider the case when friction between the object of mass m , radius r & moment of inertia I and the surface causes it to roll. If v and ω denote, respectively, the linear and angular velocities of the object, which of the following is correct?



- a.) $v = \sqrt{2gr}$ b.) $v = \omega \sqrt{\left(\frac{I}{m}\right)}$
- c.) $\omega = rv$ d.) $v = r\omega$
- e.) None of the above.