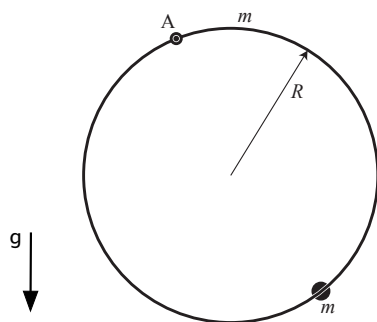


2. A thin hoop of mass m and radius R is suspended from its rim (point A) and is free to rotate around point A in the plane of the hoop. A small bead of equal mass m can slide without friction on the hoop.



Find the frequencies of the normal modes for this system.