

8-3)

Find the moment of inertia of a hoop of mass  $M$  and radius  $R$  about an axis tangent to the hoop. You may assume as given the moment about the axis perpendicular to the plane of the hoop through the center as  $MR^2$ .

HINT: You can do this directly using calculus, OR, perhaps make use of the perpendicular and/or parallel axis theorems.