A string is wrapped several times around the rim of a small hoop of radius 0.0800 m and mass 0.180 kg . If the free end of the string is held in place and the hoop is released from rest as shown below, calculate

A. the tension in the string while the hoop descends as the string unwinds.
B. The time it takes the hoop to descend 0.750 m
C. The angular speed of the rotating hoop after it has descended 0.750 m .

