Rolling ring (20 pts)

x vs. t graph - 4 pts

Function - 1 pt

v vs. t graph - 2 pts

Function - 1 pt

Derivation of a = $\frac{mgsin\theta}{\frac{I}{r^2}+m}$ - 3 pts

Derivation of I = ½m(R_i^2 + R_o^2) - 4pts

When R_i = R_o, it becomes a ring with k = 1 - 1 pt

When R_i = 0, it becomes a disk with k = ½ - 1 pt

Percent difference between actual and ideal rotational inertia - 1 pt

Theoretical acceleration - 1 pt

Percent error - 1 pt