

Homework H.2.A

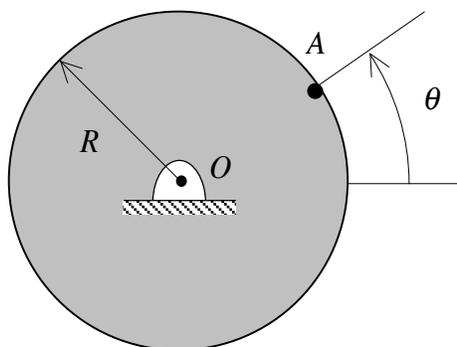
Given: The orientation angle θ for a circular disk of radius R is given by: $\theta(t) = \frac{\pi}{3} \sin \pi t$ (with θ in radians and t in seconds).

Find: Determine the velocity and acceleration vectors for point A on the outer edge of the disk for:

(a) $t = 0$ s

(b) $t = 1/3$ s

Make sketches of these vectors for the two instants in time noted above.



Use the following parameter in your analysis: $R = 0.75$ m.