## Homework H.2.C

Given: Rigid body AB is shaped as quarter-circle arc with a radius of $R$. End B of the bar is constrained to move along a vertical wall, whereas end $A$ moves along an incline at an angle of $\theta=$ $53.13^{\circ}$ with respect to the horizontal. At the instant shown, the center O of the AB arc is directly below end B , and end A moves with a constant speed of $v_{A}$.

Find: For this problem:
(a) Determine the velocity and acceleration of end B of the bar. Express your answers as vectors and in terms of the parameters of $v_{A}$ and $R$.
(b) Is the speed of B increasing, decreasing or constant?


