3. (25 points) Shown below is a generalized slider, currently in a horizontal position. If ω = 3 rad/sec and α = 2 rad/sec^2 in the directions shown, please determine and write as polar or Cartesian vectors:

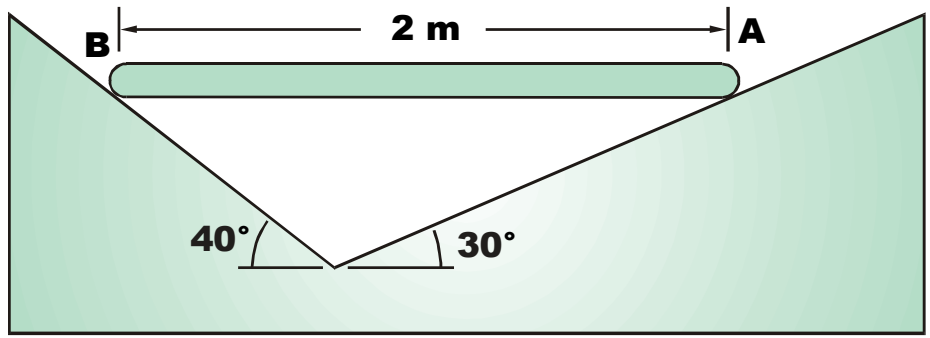
   (a) $\mathbf{v}_B$

   (b) $\mathbf{a}_B$.

For bar AB:

ω = 3 rad/s ↶

α = 2 rad/s^2 ↶



For bar AB:

ω = 3 rad/s

α = 2 rad/s^2