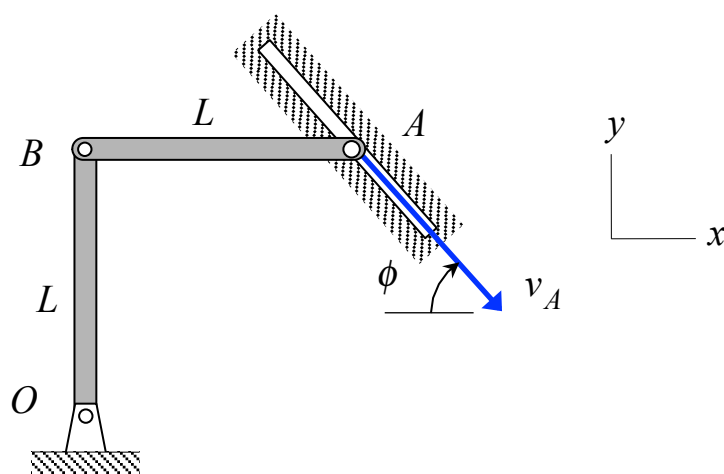**Homework 2.F**

Given: A mechanism is made up of two equal-length links OB and AB. End A of AB is constrained to move along an angled slot, as shown in the figure, with a constant speed of v_A. At the position shown, link OB is vertical and link AB is horizontal.

Find: For this position:

(a) Determine the angular velocities of links OB and AB.

(b) Determine the angular accelerations of links OB and AB.

Write your answers as vectors.

Use the following parameters in your analysis: $L = 0.5$ m, $v_A = 10$ m/s and $\phi = 36.87°$.