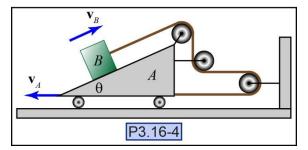
**P3.16-4)** Cart A moves to the left causing block B to slide up on the cart, as shown in the figure. Determine the velocity of B in terms of  $v_A$  and  $\theta$ .

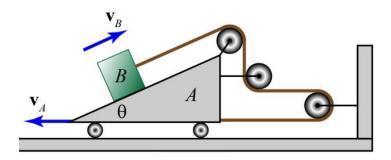
Given:

Find:



## Solution:

On the figure, draw the datum(s) and the position coordinates.



Write down the position coordinate equation(s).

Determine the relationship between  $v_A$  and  $v_B$ .