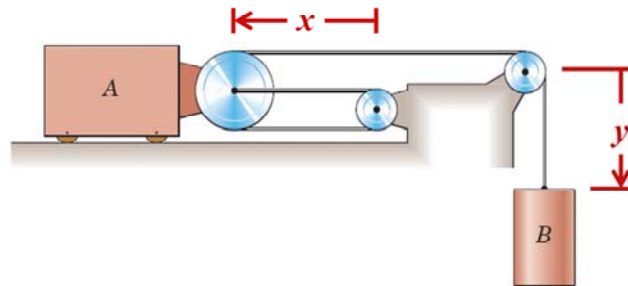


One Degree of Freedom: Exercise

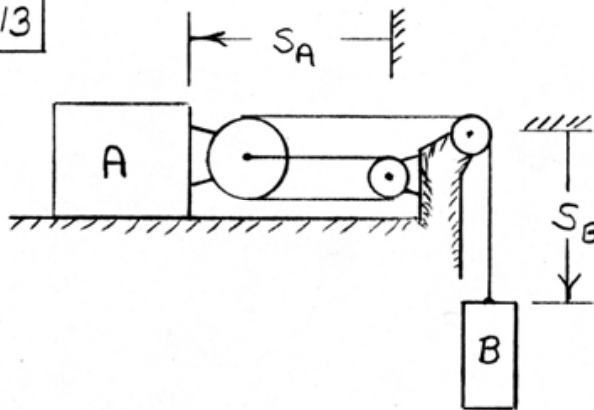


Block **A** has a **velocity** of 3.6 ft/s to the right.

Determine the **velocity** of cylinder **B**.

ME 231: Dynamics

2/213



Length of cable $L = 3s_A + s_B + \text{constant}$

Differentiate: $0 = 3v_A + v_B$

$$v_B = -3v_A = -3(-3.6)$$

$$= \underline{10.8 \text{ ft/sec (down)}}$$