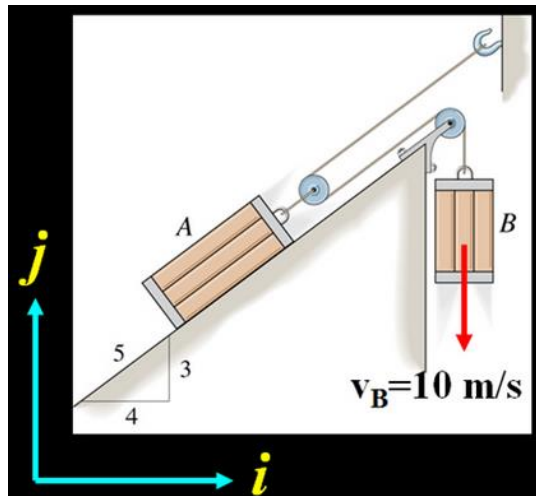


Answer on Question #71734-Physics-Mechanics-Relativity

Determine the velocity of block A when block B is moving downward with a speed of 10 m/s.



Solution

$$v_B = \frac{dl}{dt}.$$

$$v_A = \frac{1}{2} \frac{dl}{dt}.$$

$$v_A = \frac{1}{2} v_B = \frac{1}{2} 10 = 5 \frac{m}{s}.$$

The velocity of block A is

$$v_A = (4i + 3j) \frac{m}{s}$$

Answer provided by <https://www.AssignmentExpert.com>