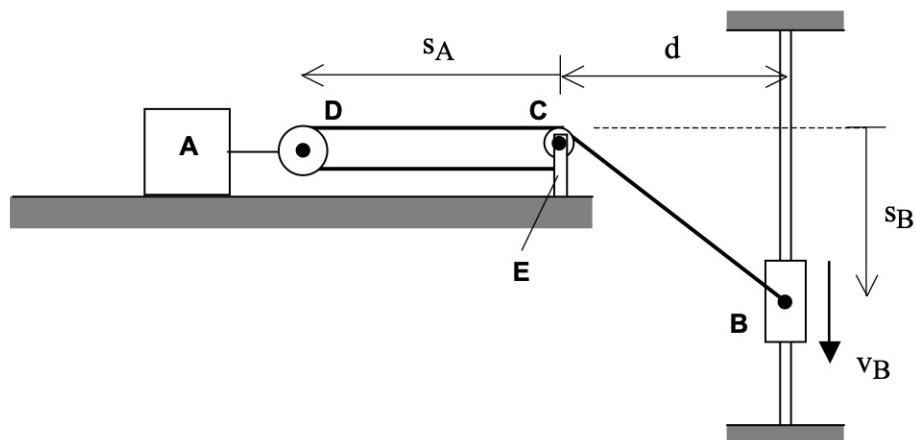


Homework H1.I

Given: An inextensible cable is attached to block B, is wrapped around pulleys C and D and is attached to a fixed support at E. Block B is constrained to move on a vertical guide, and block A is constrained to slide along a horizontal surface. Block B is moving downward with a constant speed of v_B .

Find: Determine the speed of block A.



Use the following parameters in your analysis: $d = 3$ ft, $s_B = 4$ ft and $v_B = 15$ ft/s.