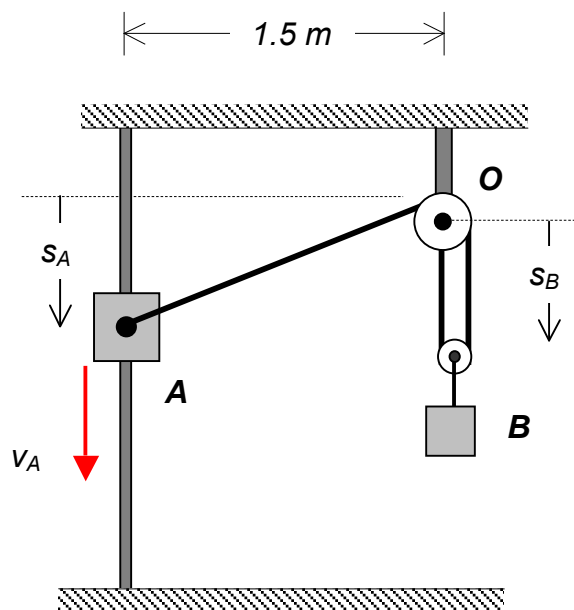**Homework H1.I**

Given: Blocks A and B are connected by the pulley-system shown below. Block A moves downward with a constant speed of v_A on a vertical guide. Assume the radii of the pulleys to be small.

Find: For this problem:

(a) Determine the speed of block B when $s_A = 0$ m.

(b) Determine the speed of block B when $s_A = 4$ m.

18 *m / sec*

Use the following parameters in your analysis: $v_A = 25$ m/s.