

Homework H1.J

Given: Blocks A and B are connected by a single inextensible cable with the cable being pulled over four fixed small pulleys, as shown in the figure. The distances d shown in the figure are known to be constant. Block A is moving to the right along a straight horizontal surface with a speed of v_A .

Find:

- Determine the speed of B, v_B . Your answer should be in terms of, at most: h , s_A and v_A .
- Which is larger, v_A or v_B , as A moves to the right? Provide an explanation for your answer.

