Willie Makit runs horizontally off a ledge 1.5m above a pond at 3 ^{m}/s horizontally. Will Willie land in the hole of the floating inner tube?
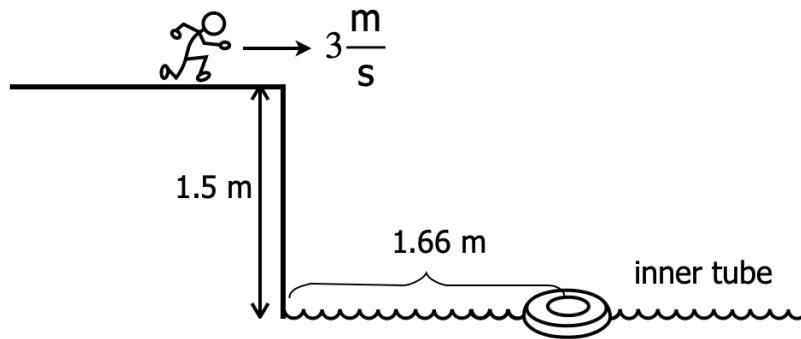
In a show of great skill and talent, Betty Wont, is running horizontally off a ledge onto a floating dock. The ledge is 2 m above the dock's surface. The dock if 3.0 m away from the ledge. How fast does Betty need to run to land in the middle of the dock 3 m away?
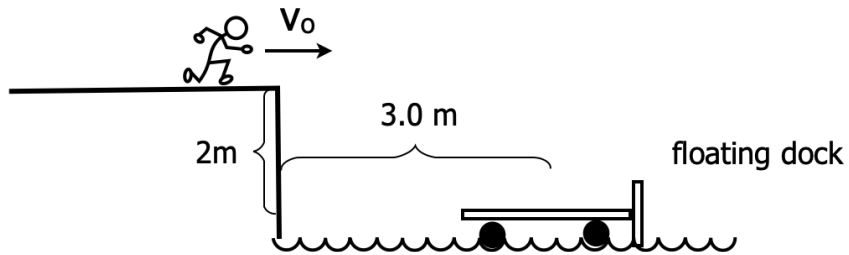
The engineering 101 class is preparing a talent act for "America's Got Talent." They are going to drive a car horizontally off one building and onto another. They need to land 8 m away from the starting edge to land safely. The speed the car can leave the first building is limited by the length of the building's roof leading up to the ledge. How high must the left build be to safely land on the "landing target?"

$10\dfrac{m}{s}$

landing target

?

8 m