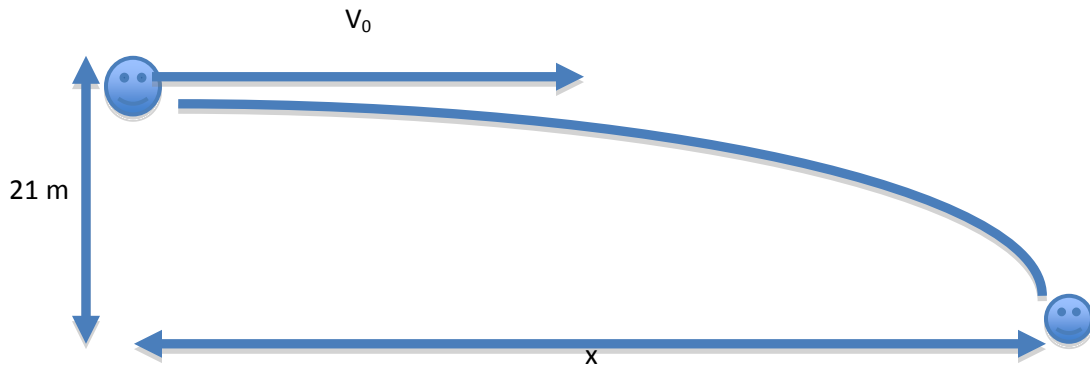


Roller Soaker

1. If the cart is moving at 9.2 m/s and you want to take advantage of the soak-the-people-below-you feature of this ride, at what horizontal distance x should you pull the lever? Assume that the water will be released from the maximum height of the ride $h = 21 \text{ m}$.



2. If you are going around a turn (assume it is a perfect semi-circle,) and you pull the lever to release all the water, which path will the water take? (Note: This is an aerial view, looking straight down on the cart taking the turn.)

