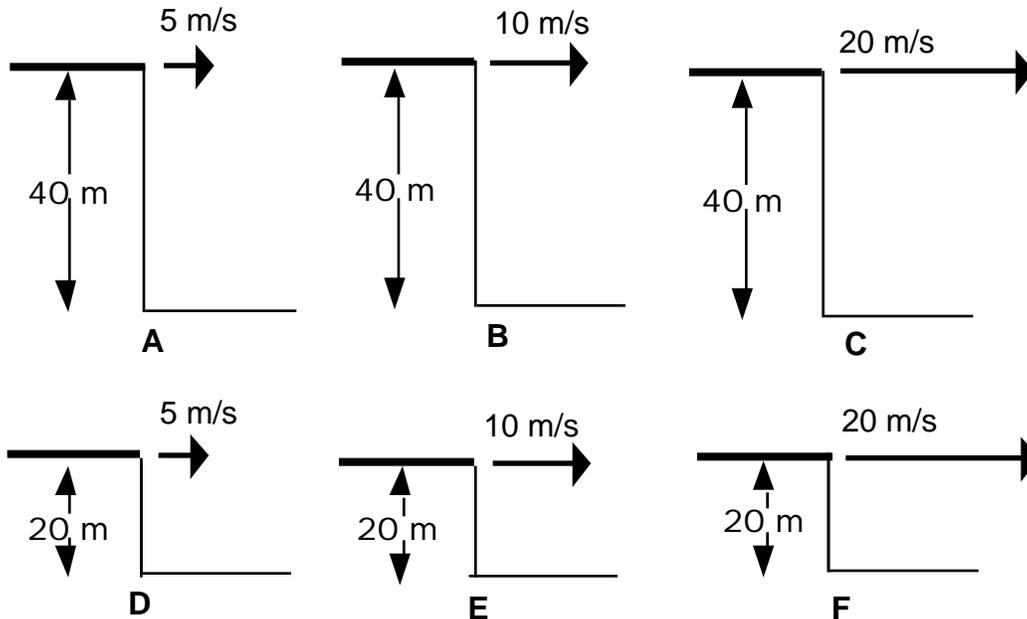


Water Over a Waterfall—Time to Reach Ground ⁴⁴

Pictured below are six waterfalls all of which have the same amount of water flowing over them. The waterfalls differ in height and in the speed of the water as it goes over the edge. The specific values of the heights and speeds are given in the figures.

Rank these situations from longest to shortest based on how long it takes the water to go from the top of the falls to the bottom. That is, put first the situation where it takes the water the most time to go from the top of the falls to the bottom, and put last the one that takes the least time.



Longest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Shortest

Or, water from all of the waterfalls reaches the bottom at the same time. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed

Sure

Very Sure

1 2 3 4 5 6 7 8 9 10

⁴⁴ D. Maloney