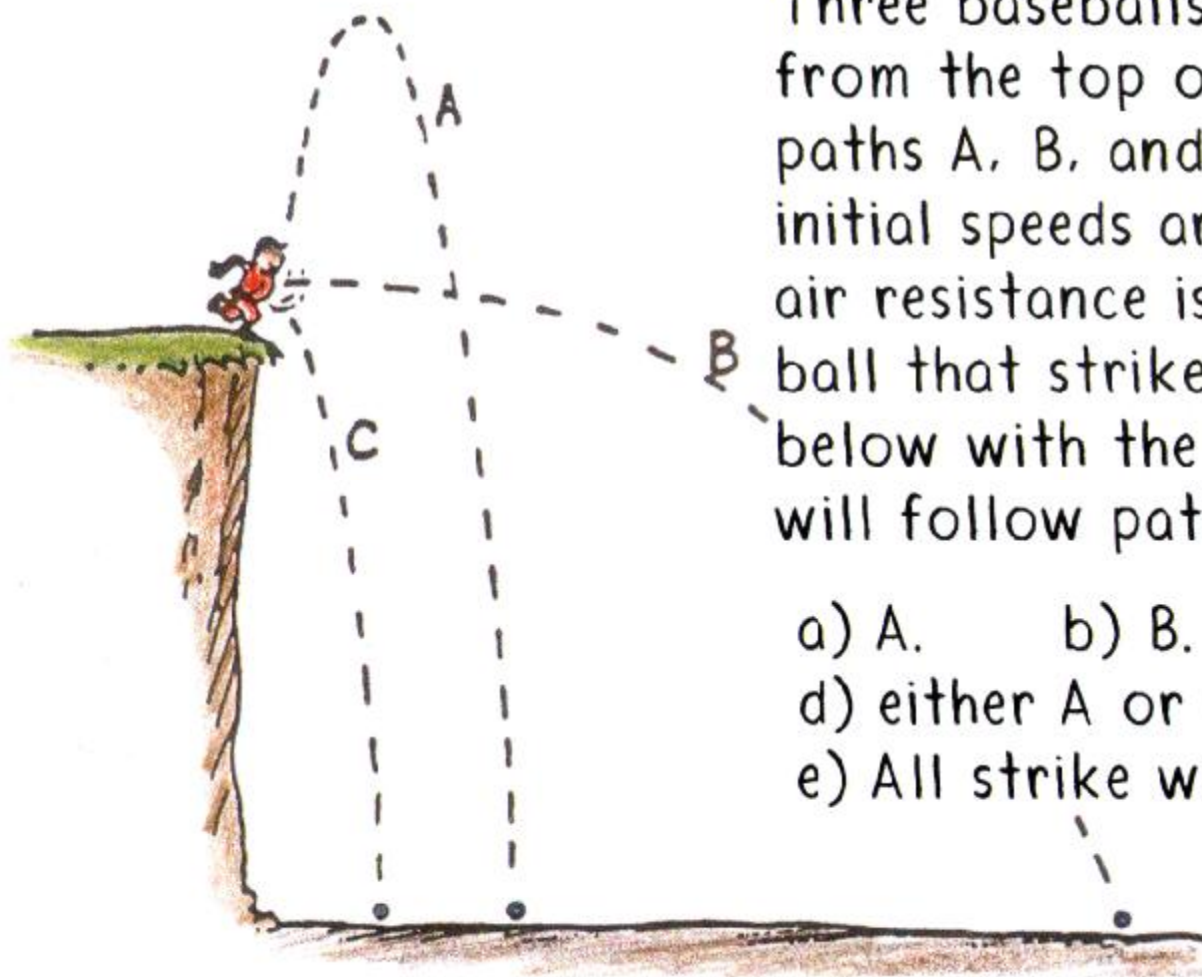


NEXT-TIME QUESTION

CONCEPTUAL Physics



Three baseballs are thrown from the top of the cliff along paths A, B, and C. If their initial speeds are the same and air resistance is negligible. The ball that strikes the ground below with the greatest speed will follow path

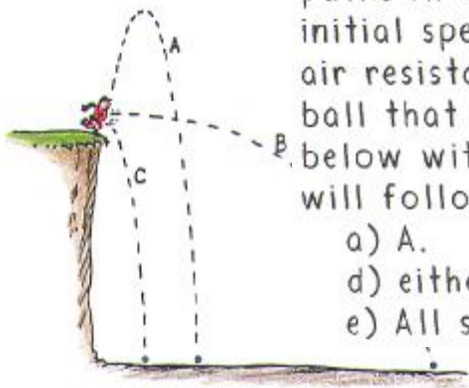
- a) A.
- b) B.
- c) C.
- d) either A or C.
- e) All strike with the same speed.



NEXT-TIME QUESTION

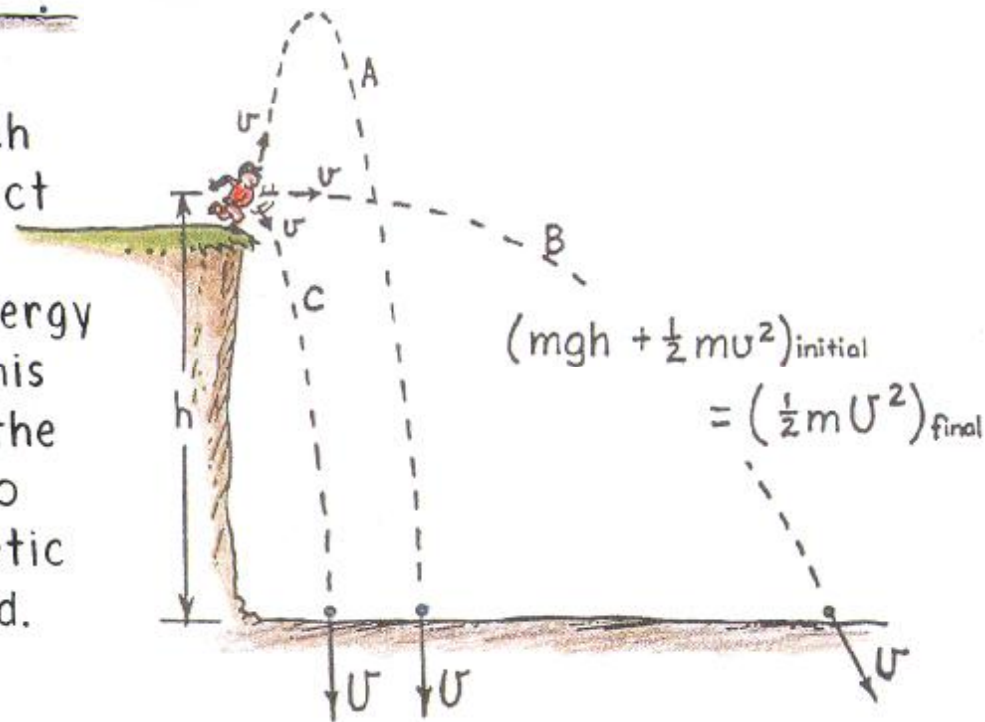
Three baseballs are thrown from the top of the cliff along paths A, B, and C. If their initial speeds are the same and air resistance is negligible. The ball that strikes the ground below with the greatest speed will follow path

- a) A.
- b) B.
- c) C.
- d) either A or C.
- e) All strike with the same speed.



Answer: e

The speed of impact for each ball is the same. With respect to the ground below, the initial kinetic + potential energy of each ball is the same. This amount of energy becomes the kinetic energy at impact. So for equal masses, equal kinetic energies mean the same speed.



Hewitt
Drewitt!