For which one of the following situations will the path length equal the magnitude of the displacement?

A) A jogger is running around a circular path.
B) A ball is rolling down an inclined plane.
C) A train travels 5 miles east; and then, it stops and travels 2 miles west.
D) A ball rises and falls after being thrown straight up from the earth's surface.
E) A ball on the end of a string is moving in a vertical circle.

Solution

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Which one of the following is *not* a vector quantity?

A) acceleration
B) average velocity
C) average speed
D) instantaneous velocity
E) displacement

Solution

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