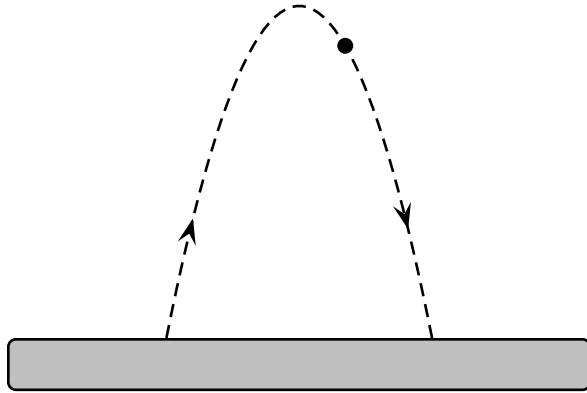


A ball is thrown and follows the parabolic path shown. Air friction is negligible. At the tip-pity top of its path its velocity is momentarily minimal.



What is its acceleration at the highest point.

- A) The acceleration at the top is  $9.8 \text{ m/s}^2$  down.
- B) The acceleration at the top is  $0 \text{ m/s}^2$ .
- C) The acceleration at the top is  $9.8 \text{ m/s}^2$  up.
- D) Since the ball is in free-fall, its acceleration is undetermined.

Near the surface of the Earth, for all practical purposes the gravitational

acceleration is constant, and equal to  $9.8 \text{ m/s}^2$  in the downward direction.

**Answer A.**

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