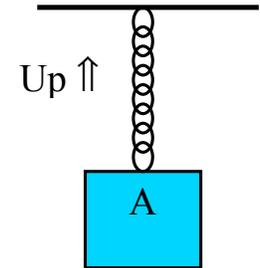


The sketch above shows the PE of an object as a function of position. Assume that the force generating this potential energy is the only force acting on the object. If a particle is moving around in x , at what point is the particle's speed a maximum?

- 1) a
- 2) b
- 3) c
- 4) d
- 5) e
- 6) Impossible to answer without more information.

A block is attached to a spring. The block is released from rest. After falling a certain distance, the block will again stop momentarily. Where will the block stop?



- 1) The block will stop where the force of gravity exactly matches the force of the spring.
- 2) The block will stop where the potential energy of the spring exactly matches the potential energy of gravity at that point.
- 3) The block will stop where the potential energy of the spring exactly matches the initial potential energy of gravity.
- 4) The block will stop where the sum of gravitational and spring potential energy exactly matches the sum when it was released.
- 5) More than one of the above.
- 6) None of the above.