## Example

A bowling ball is released from position A with an initial velocity of 3 m/s. The ball swings in a vertical plane. At the bottom position, the cord strikes the fixed bar at B, and continues to swing. Calculate the velocity of the ball as it passes position C.



## Example

A 10-kg slider is originally at rest in position *A* where the spring is stretched a distance of 0.6 m. (The attached spring has a stiffness [i.e., k] of 60 N/m.) A constant 250-N force is then applied to the pulley and the slider moves with negligible friction in the cylinder as shown. Calculate the velocity of the slider as it passes point *C*.

