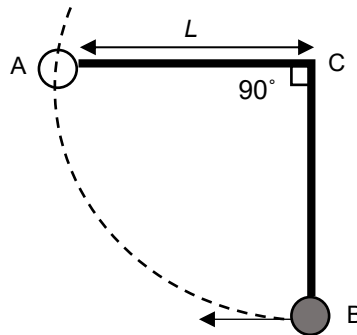


- 9 A simple pendulum consists of a bob of mass  $m$  at the end of a light and inextensible thread of length  $L$ . The other end of the thread is fixed at C. the bob swings through point B with a velocity  $v$  and just reaches A, where the string is just taut.



What is the tension in the thread when the bob is at position B?

- A**  $mg$                       **B**  $2mg$                       **C**  $3mg$                       **D**  $4mg$