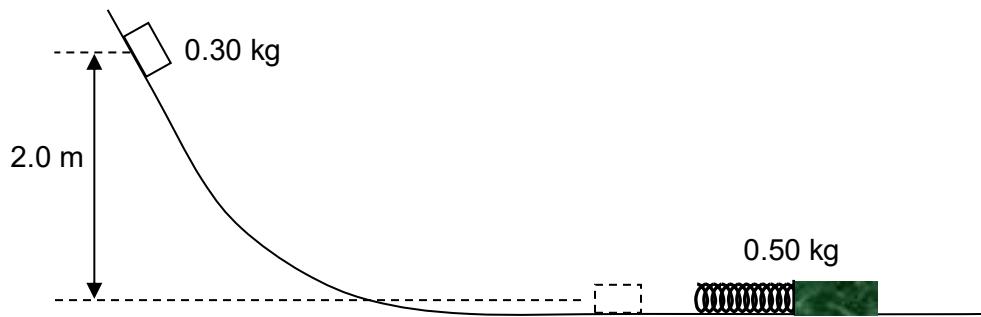


- 8** A mass of 0.30 kg slides from rest at height 2.0 m down a smooth curved surface which becomes horizontal at zero height. Another mass with a spring attached has a total mass of 0.50 kg and it is at rest on the level part of the surface. During collision, the maximum compression of the spring is 0.20 m.



What is the spring constant?

- A**  $184 \text{ N m}^{-1}$       **B**  $196 \text{ N m}^{-1}$       **C**  $253 \text{ N m}^{-1}$       **D**  $294 \text{ N m}^{-1}$