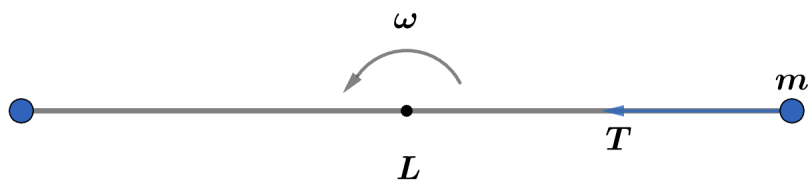


## 2015 F=ma Exam: Problem 14

Kevin S. Huang



Looking at one of the masses, we see that the tension provides the centripetal acceleration,

$$T = m\omega^2 r = \frac{m\omega^2 L}{2} = \frac{(5 \text{ kg})(4 \text{ s}^{-1})^2(3 \text{ m})}{2} = 120 \text{ N}$$

so the answer is C.