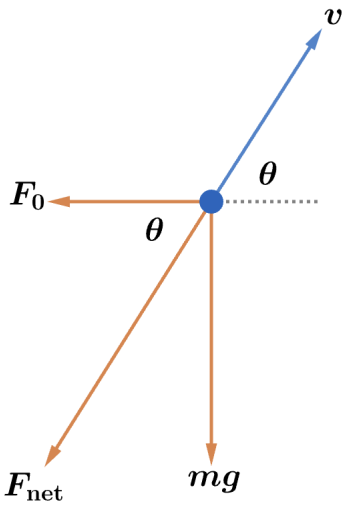
2007 F=ma Exam: Problem 24

Kevin S. Huang



There is a constant net force F_{net} acting on the ball so it has to be thrown opposite to F_{net} to come back to its starting position. We have

$$\tan\theta = \frac{mg}{F_0}$$

$$\theta = \arctan\left(\frac{mg}{F_0}\right)$$

so the answer is $\boxed{\text{B}}$.