

Engineering Physics I – Fall 2015

Quiz 5 – October 15, 2015

Name:

1. What are the two types of friction? (Circle the right answers from the choices below)

Gravitational

Static

Tension

Kinetic

Contact

Normal

2. True or False      The constant  $g = 9.81 \text{ m/s}^2$  is a force.

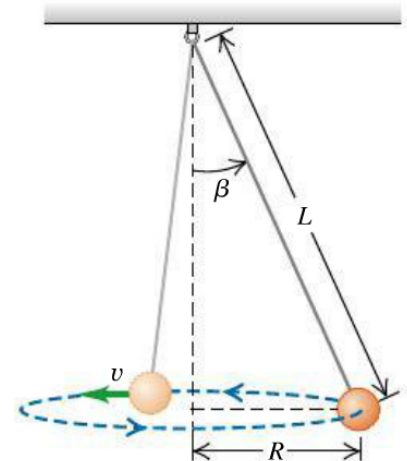
3. What is the net force on the ball shown in the figure?  
(The ball is hanging on a string and is spinning around at a constant speed. Gravity is acting on the ball.)

$mg$

$ma_c$

zero (N)

$T$  (tension in rope)



4. I apply a force of magnitude  $F=10 \text{ N}$  to an object that is initially at rest on a horizontal surface, and it remains at rest.

a) What is the magnitude of the friction force?

$\mu_s mg$

$\mu_k mg$

zero (N)

$F$  (10 N)

b) Do you have enough information to calculate  $\mu_s$ ?

Yes

No

