Unit One - Review

Jun 18-9:13 AM

What is your displacement after travelling the following:

$d_1 = 56m \text{ @ } 80^o$

$d_2 = 90m \text{ @ } 200^o$

$d_3 = 75m \text{ @ } 300^o$

Jun 18-9:13 AM

What is the difference between an inertial frame of reference and a non-inertial frame of reference?

Jun 18-9:15 AM

A golf ball is hit off of level ground. The golf ball is hit an angle of 30 degrees to the ground at 25m/s. How long is it in the air? How far down the fairway does it go?

Jun 18-9:16 AM

A ferris wheel with a diameter of 20 m breaks down and starts spinning out of control, with a period of 10 seconds;

(i) what is the velocity of a passenger sitting in a chair on the edge of the ferris wheel?

(ii) what is the net force acting on a person at the very top of the ferris wheel if the passengers mass is 60kg?

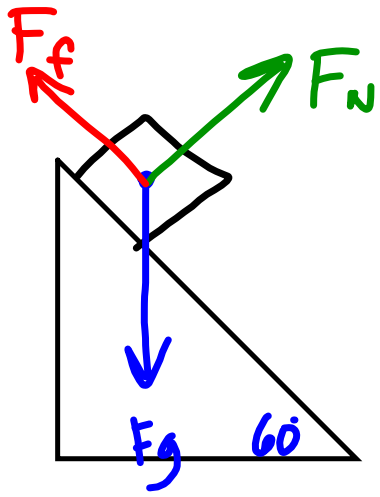
(iii) what is the normal force acting on a person at the very bottom of the ferris wheel if the passengers mass is 60kg?

Jun 18-9:19 AM

How far does a 25kg object slide on a surface with a coefficient of friction of 0.3, when its initial velocity is 15m/s, before it comes to a rest?

Jun 18-9:24 AM

What coefficient of friction is required to hold a 30kg mass in place on a ramp inclined at 60º?



Jun 18-9:28 AM

What is the acceleration (mag and dir) of an object that changes from an initial velocity of 40 m/s @ 60^{o}, to a final velocity of 50 m/s at 100^{o} in 2 seconds

Jun 18-10:30 AM