


If your answer was...

10.0 s




Find the answer to...

An air bag is effective because it increases the time interval over which it acts thus allowing the amount of force to

Mar 16-10:17 AM

If your answer was...

angular momentum




Find the answer to...

A hockey player slides a puck on ice toward another puck for target practice. If the one puck strikes another, the first puck will stop moving. In terms of conservation of momentum, describe what happens to the second puck.

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If your answer was...

both closed and isolated




Find the answer to...

A student on in-line skates is holding onto a grocery cart. She pushes the cart away from her. The resulting backward movement of the skater is an example of

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If your answer was...



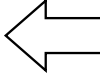
The raft moves in the direction as the bag was thrown.

Find the answer to...

What is the momentum of a 284-g rubber ball traveling at 40.0 m/s?

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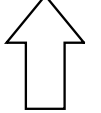
If your answer was...  
 angular momentum



Find the answer to...  
 What impulse is needed to stop a 23 -g mass traveling at a velocity of 83 m/s?

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If your answer was...  
 Constant



Find the answer to...  
 The angular momentum of an object equals the product of the object's

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If your answer was...  
 to the left



Find the answer to...  
 Suppose you are sitting on a huge raft that is motionless on the water. What happens when someone standing on a dock nearby tosses a very heavy sun bathing bag to you, assuming that you catch it?

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If your answer was...  
 14.3 m/s



Find the answer to...  
 The greatest change in momentum will be produced by a large force acting over a(n) \_\_\_\_\_ period of time.

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If your answer was...  
 equal to



Find the answer to...  
 When a garden hose is hooked to an outside faucet and the water is turned on, the hose will start to move in the yard. Why does the garden hose recoil when the water is turned on?

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If your answer was...  
 a net torque on it, and its direction changes



Find the answer to...  
 If a torque-free object starts with no angular momentum, it must

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If your answer was...  
 decrease



Find the answer to...  
 If no torques are acting on an object, its angular momentum is

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If your answer was...  
 The two pucks are in a closed, isolated system so momentum is conserved. The 1st puck will impart most of its momentum to the second puck, which will move in the same direction and at almost the same speed.




Find the answer to...  
 A person is standing on roller blades and is holding a heavy medicine ball. If she throws the ball horizontally to the right, her resulting motion will be

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If your answer was...

recoil




Find the answer to...

Gyroscopes are used to fix direction because they have

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If your answer was...

6.6 m/s

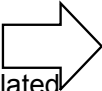


Find the answer to...

A 20 kg pet pig running at a speed of 4.0 m/s jumps onto a stationary skateboard that has a mass of 4.2 kg. How long will it take a force with a magnitude of 8.0 N to stop the skateboard and the pet pig?

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If your answer was...



The hose and water system form an isolated, closed system so momentum is conserved. The velocity of the water increases as it moves, so it gains momentum. The hose, itself must gain and equal amount of momentum in the opposite direction and recoil.


Find the answer to...

A diver jumping from a board into a pool can move his arms and legs to alter his

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If your answer was...

moment of inertia  
and angular velocity

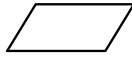


Find the answer to...

In order for momentum to be conserved, the system must be

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If your answer was...



continue to have no angular momentum

Find the answer to...

A ball with a mass of 10-g is moving at 14 m/s. It collides with a second ball with a mass of 34-g moving at 4 m/s. After the collision, the 10-g ball moves at 5.0 m/s. What is the velocity for the 34-g ball after the collision?

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If your answer was...



11.36 kg\*m/s

Find the answer to...

The precession of a spinning top indicates there is

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If your answer was...



$-1.9 \times 10^3 \text{ kg}\cdot\text{m/s}$

Find the answer to...

A metal sphere with a mass of 80.0 g rolls along a frictionless surface at 25.0 m/s and strikes a stationary sphere having a mass of 140.0 g. The first sphere stops completely. At what speed does the second sphere move away from the point of impact?

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If your answer was...



long

Find the answer to...

When a golf club hits a golf ball, the change in momentum of the ball is \_\_\_\_\_ the change in momentum of the club.

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