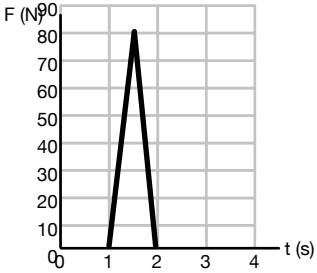


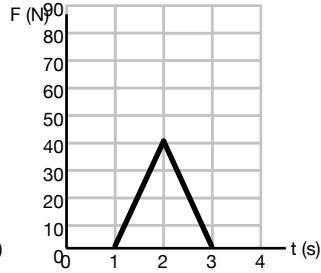
Cycle 25 Momentum

1. Impulse & Momentum

Ball A



Ball B

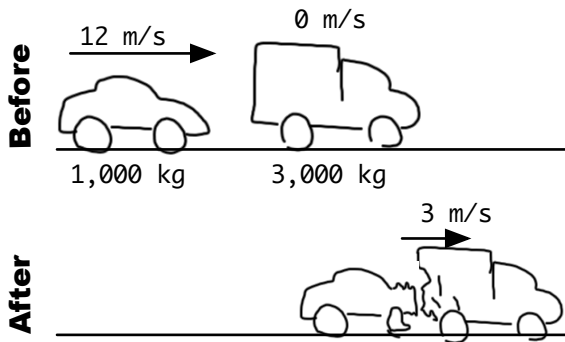


1. Two identical balls receive the impulses shown in the graphs.

- a) What all can you calculate, just from the graphs?
- b) What can you say about Ball A compared to Ball B?

2. A 100 kg quarterback collides with a defensive end, going from 6 m/s down to 2 m/s.

- a) What is the change in momentum of the quarterback?
- b) What impulse was delivered to the quarterback?
- c) If the collision lasted 1.2 seconds, what was the average force delivered to the quarterback?



3. The car collides with the truck, as shown. Afterward, they are moving at the same speed.

- a) Calculate the change in momentum of the car.
- b) What Impulse was delivered to the car?
- c) Calculate the change in momentum of the truck.
- d) What Impulse was delivered to the truck?