Corona Week 5 Impulse

1. CP Basics

1. The man runs and jumps onto a velcro wall.

The wall applies an average force of 50 N for 2 s to the person.

- a) Calculate the impulse delivered to the person.
- b) What impulse did the wall get?
- c) What force did the wall get?



2. A ball is dropped onto a force plate which measures an average force of 12 N for 1 second. Next, we repeat the experiment, but we place a soft piece of foam on top of the force plate so that the collision takes 3 seeconds.

- a) Predict the new average force.
- b) In which case was the impulse greater?
- 3. Explain using physics terms how the pads that sports players wear keeps them safer.

- 4. Match the force graph to the situation.
 - _____ Falling onto a concrete floor.
 - _____ Falling onto a soft pad.
 - _____ I bend my knees when landing.
 - _____ I catch a baseball with no baseball mitt.

