

Chapter C3: More Momentum

Physics I

College of the Atlantic

1. A 2 kg cart moving at 4 m/s to the right hits a 10 kg cart that is at rest. After the collision, the 2 kg cart is moving to the left at 1 m/s.
 - (a) How much momentum does the right cart transfer to the left cart?
 - (b) How much momentum does the left cart transfer to the right cart?
 - (c) What is the velocity of the right cart after the collision?
 - (d) Draw an arrow diagram for this situation.
2. A 4 kg cart moving a 3 m/s to the right hits a stationary 2 kg cart. The two carts stick together. What is the velocity of the two stuck-together carts?