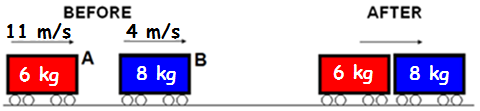
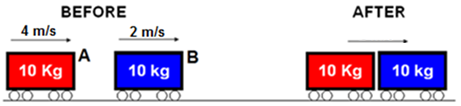
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

**Collisions and Conservation of Momentum:**

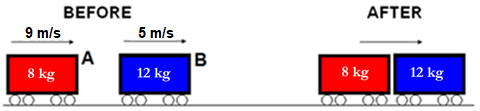
1. In elastic collisions, the objects \_\_\_\_\_\_\_\_\_\_\_\_\_\_ after colliding.
2. In inelastic collisions, the objects \_\_\_\_\_\_\_\_\_\_\_\_\_\_ after colliding.
3. The law of conservation of momentum states that the total momentum before a collision is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the total momentum after a collision.



1. The two carts above collide with one another and they stick together.
   1. What type of collision is this?
   2. What is the total momentum before the collision?
   3. What is the total momentum after the collision?
   4. What is the speed of the two stuck-together carts after the collision?



1. The two carts above collide with one another and they stick together.
   1. What type of collision is this?
   2. What is the total momentum before the collision?
   3. What is the total momentum after the collision?
   4. What is the speed of the two stuck-together carts after the collision?



1. The two carts above collide with one another and they stick together.
   1. What type of collision is this?
   2. What is the total momentum before the collision?
   3. What is the total momentum after the collision?
   4. What is the speed of the two carts after the collision?