Name_____

Date_____ Pd____

Impulsive Force Model

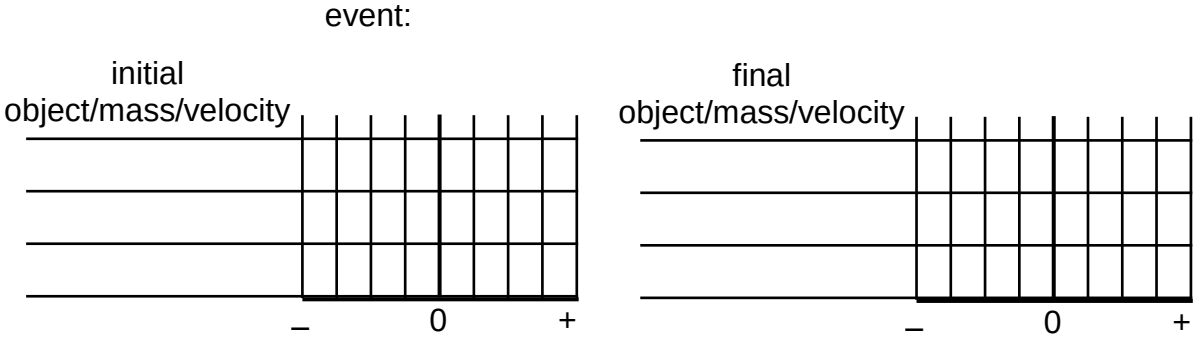
Conservation of Momentum Examples

As long as no objects external to the system contribute to net forces on the system,

Total initial momentum = Total final momentum

1. Specify the impulsive force event that separates initial and final situations.
2. Designate objects in the system by listing the object, its mass, and its velocity in the chart -- use variables for unknown quantities.
3. Draw a horizontal bar to represent the size and direction of the momentum for each object.
4. Write the conservation of momentum equation for the bars and solve for the unknown quantity.

Example 1:



Example 2: