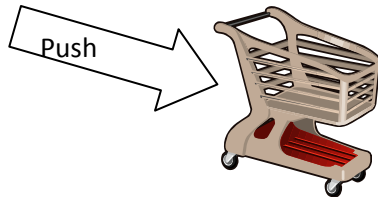


Name: \_\_\_\_\_

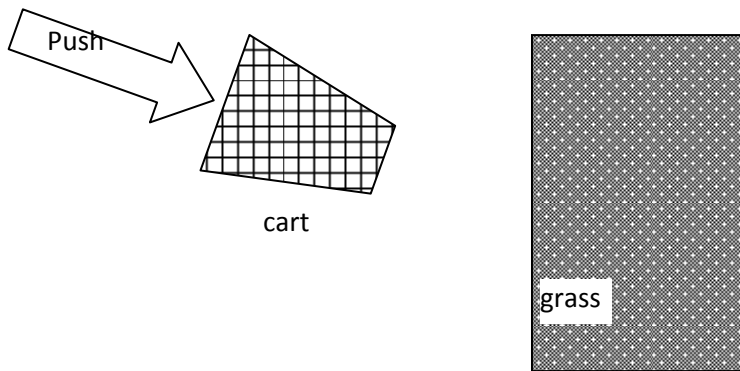
Date: \_\_\_\_\_

### Phys 115 Pre - lab 3

If you give a strong push to a shopping cart on a very large, smooth and absolutely flat parking lot. Please think through and carefully explain the following questions carefully



- (a) Please draw the track of the motion of the cart on the graph above. Please keep in mind, after the initial push, you hands will be off the cart and this holds true for all the questions below!
- (b) If the cart hits on a strip of grass with an angle as indicate in the top view below, what 's the direction of the cart when it is on grass? What's the direction after it leaves grass? Please carefully show it on the graph and explain why.



- (c) What is the direction of the motion of two carts ON and OFF grass, with initial pushes as indicated below? please draw the directions and explain your reasons.

