



Momentum Data:

t= 0 cart.p= <0.556, 0.08, 0>

t= 1.0 cart.p= <0.156, 0.08, 0>

t= 2.0 cart.p= <-0.244, 0.08, 0>

t= 3.0 cart.p= <-0.644, 0.08, 0>

Lab Questions

1)

Initial Momentum vector:

t= 0 cart.p= <0.556, 0.08, 0>

Final Momentum vector:

t= 0.01 cart.p= <0.552, 0.08, 0>

Delta Momentum = <-0.004,0,0> kg m/s

2)

Final Momentum – Initial Momentum= Delta Momentum

Delta Momentum= Net Force\*Delta Time

Net Force= <-.4,0,0>

Delta Time= .01

Net Force\* Delta Time= <-0.004,0,0>

3)

My Calculations show that the Net Force\*Delta time= Delta Momentum.

4)

The Net Force is only exerted in the x direction, so the momentums in the y and z directions do not change. This is because there is no acceleration so there is no change in velocity.

