Ex 2: Two ice skaters (one good one bad) are on the ice. The first skater with a mass of 75kg is travelling North with a velocity of 7.0m/s. The second ice skater (m=55kg) is travelling South with a velocity of 2.1m/s. They collide and hold on to one another for dear life. What is their final velocity?

Ex 3: A shotgun with a mass of 2.54kg shoots a shell (m=0.02kg) with a velocity of 250m/s. What is the recoil velocity on the shotgun?

Ex 4: Using the above information, if the shell took 0.0030 seconds to travel out the end of the barrel, what is the impulse and what is the force acting on the shell?