

Friday, October 19/12
Physics 122/121

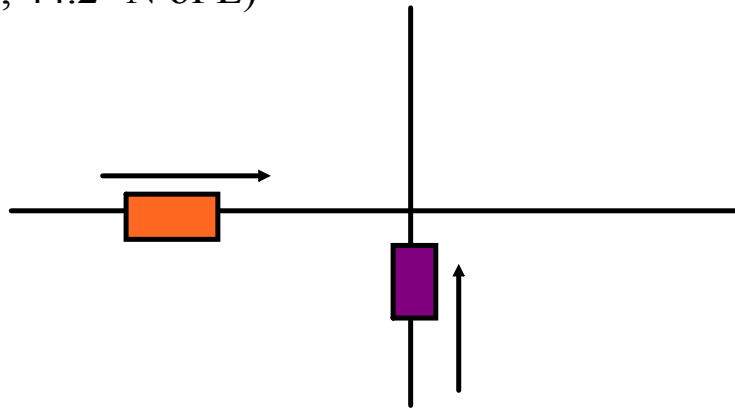
1. 1D Collisions/Explosions
2. Handout - 1D Collisions -> Try #1, 3, 5, 7, 9 HW for Monday
3. 2D Collisions/Explosion P1 complete Example 2 for Monday
P6 complete Example 1 for Monday
4. Experiment 9.1- Conservation of Momentum
- Lab Manual: Page 55
5. Elastic and Inelastic Collisions (1D)



1D Collisions

Handout: #1-10 -> Try #1, 3, 5, 7, and 9

Example: A 1325 kg car moving north at 27.0 m/s collides with a 2165 kg car moving east at 17.0 m/s. They stick together. In what direction and with what speed do they move after the collision?
(14.7 m/s, 44.2° N of E)



Example: A 1200 kg car is moving east at 30.0 m/s and collides with a 3600 kg car moving at 20.0 m/s in a direction 60.0° N of E. The vehicles interlock and move off together. Find their common velocity.
(19.8 m/s, 40.9° N of E)

