**Unit 2 Problems**

**IV**

1. **If one car had a mass of 125 Kg traveling at a velocity of 25 mi/hr, collided with another car that was traveling 315 mi/hr, what would the mass of the 2nd vehicle be? (use the conservation of momentum)**
2. **If a person with a mass of 38 Kg was running with a velocity of 242.5 m/s what is his momentum?**
3. **If an object fell for 25.5 minutes, how far would it fall?**
4. **If a boxer punching his opponent did it with an impulse of 395 N s and a time interval of 1.05 s, how many Newtons was the force applied?**
5. **If a car had a momentum of 1,150 Kg m/s, a mass of 78.98 pounds, what is the cars velocity?**
6. **If a car accelerated from 155 mi/hr to 160.35 mi/hr. in 23.2s how far did the car go while it was accelerating?**