**Unit 6 Problems I**

1. **If you had a series circuit with 3 resistors that created a resistance in ohms of: 3.7, 4.1, and 6.5, what would the total resistance for the circuit be?**
2. **If the above circuit was in parallel, what would the resistance be?**
3. **Look at the picture below and calculate the net force acting in particle “B”: Extra Credit!**

**.5 m**

**.45 m**

1. **If a car traveling 10 m/s at 0 degrees collided with another car traveling 9.5 m/s at 90 degrees, what is the resultant?(use Pythagorean)**
2. **If a person was running 1.5 m/s at 27 degrees ran into another person running 15.7 m/s at 190 degrees, what is the resultant?(Use Law of Cosine).**
3. **If a circuit had a resistance of 2.5 Ohms, a Voltage of 5.6 V, what is the amperage?**

**Calculate the resistance**

**1.2 ohm 2.2 ohms**

**3.3 ohms**

**5.1 ohm**

**6.2 ohms**

**7.3 ohms**