B1.2 DISPLACEMENT AND VELOCITY WORKSHEET

<u>Directions:</u> You must show all your work in order to earn marks. Include all equations, substitutions, conversions, units and significant digits. If you get stuck, draw a picture!

1. Grant is standing at a position $\vec{d}_G$ = 45m [W] and Serina is at postion $\vec{d}_S$ = 22m [W]. What is the displacement from Grant to Serina? (2 marks)

2. Brooks is 11km south of Hanna. Killam is 122 km north of Hanna. What is the displacement from Brooks to Killam? (2 marks)

3. Jennifer throws a softball 7.8m east to Sasha. Sasha throws it 9.5m east to Clair. Clair throws it 8.2m west to Brianna. Brianna throws it 9.1m west to Kerry. What distance did the softball travel? What was the total displacement?

4. A skier goes 148m [W] in 5.50s. What is the skier's velocity? (3 marks)