Vectors: Velocity

Draw a scale diagram and find the average speed and velocity of the Martian Rover.

$$\overline{v} = \frac{s}{t} \qquad \overline{v} = \frac{d}{t}$$

1. Start: 5 km due East then 6 km due South and stop. Time: 2 hours	2. Start: 3 km due East then 3 km due South followed by 3 km due West and stop. Time: 1 hour	3. Start: 4 km due East then 2 km due South then 4 km due East followed by 2 km due South and stop. Time 3 hours
4. Start: 3 km due West then 3 km due East then stop. Time 2 hours. * What do you notice about the average speed and average velocity?	5. Start: 6 km due East then 6 km on a bearing of 230^{O} then stop. Time 3 hours.	6. Start: 4 km due South followed by 5km on a bearing of 060^{O} then stop. Time 5 hours