Velocity Problems

1. An Olympic sized swimming pool is 50 meters in length. A swimmer swims across the pool and back in 28 seconds.
   a) Distance _____
   b) Time_____
   c) Displacement_____
   d) Speed_____
   e) Velocity_____

2. An Olympic sized swimming pool is 50 meters in length. A swimmer swims across the pool and half way back in 21 seconds.
   a) Distance _____
   b) Time_____
   c) Displacement_____
   d) Speed_____
   e) Velocity_____

3. An Olympic sized swimming pool is 50 meters in length. A swimmer swims ¼ of the way across the pool in 7 seconds.
   a) Distance _____
   b) Time_____
   c) Displacement_____
   d) Speed_____
   e) Velocity_____

4. A hallway is 100 feet long. A student runs down the hallway and all the way back (one lap) a total of four times. On the fifth lap the student becomes fatigued and only makes it half of the way before stopping to rest.
   a) Distance _____
   b) Time_____
   c) Displacement_____
   d) Speed_____
   e) Velocity_____

5. The speedometer of a car moving to the east reads 60mi/hr. It passes another car that moves to the west at 60mi/hr. Do both cars have the same speed? Do they have the same velocity?

6. Correct your friend who says, “The dragster rounded the curve at a constant velocity of 80mi/hr.”

7. If you walk 3 miles east and 4 miles north, what is your displacement?

8. If a person runs around a racetrack at a constant speed, will their velocity be the same?