

- 1) Suppose that an object travels from one point in space to another. Make a comparison between the displacement and the distance traveled. 1) _____
- A) The displacement is either greater than or equal to the distance traveled.
 - B) The displacement can be either greater than, smaller than, or equal to the distance traveled.
 - C) The displacement is either less than or equal to the distance traveled.
 - D) If the displacement is equal to zero, then the distance traveled will also equal zero.
 - E) The displacement is always equal to the distance traveled.
- 2) You drive 6.00 km at 50.0 km/h and then another 6.00 km at 90.0 km/h. Your average speed over the 12.0 km drive will be 2) _____
- A) equal to 70.0 km/h.
 - B) less than 70.0 km/h.
 - C) exactly 80.0 km/h.
 - D) greater than 70.0 km/h.
 - E) cannot be determined from the information given, must also know directions traveled
- 3) Arthur and Betty start walking toward each other when they are 100 m apart. Arthur has a speed of 3.0 m/s and Betty has a speed of 2.0 m/s. Their dog, Spot, starts by Arthur's side at the same time and runs back and forth between them at 5.0 m/s. By the time Arthur and Betty meet, what distance has Spot run? 3) _____
- 4) Arthur and Betty start walking toward each other when they are 100 m apart. Arthur has a speed of 3.0 m/s and Betty has a speed of 2.0 m/s. How long does it take for them to meet? 4) _____