

Position & Velocity Review

Answers

1. Speed is the distance an object travels in a certain amount of time.

Velocity is the rate of change of position of an object in a particular direction

Speed is scalar and measures distance with respect to time and velocity is a vector which measures displacement with respect to time.

2. Distance is the amount of space between two objects.

Displacement is the difference between the objects initial and final position.

Distance is the total length the object has travelled where as displacement takes into account direction. Distance is scalar and displacement is a vector quantity

3. a) You 35 km/h [W] -15 km/h [E] or 15 km/h [W]
car 50 km/h [W]

b) 35 km/h [W] 50 km/h [E]
 15 km/h [E]