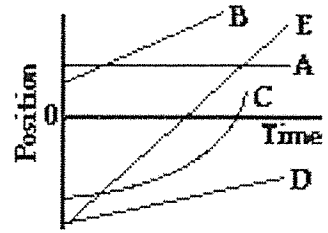


Position Time Wg #1

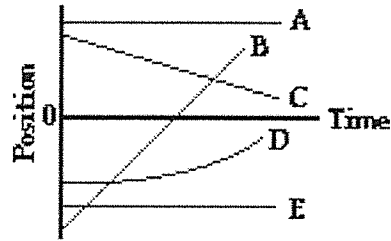
1. The slope of the line on a position vs. time graph reveals information about an object's velocity. The magnitude (numerical value) of the slope is equal to the object's speed and the direction of the slope (upward/+ or downward/-) is the same as the direction of the velocity vector. Apply this understanding to answer the following questions.

- A horizontal line means _____.
- A straight diagonal line means _____.
- A curved line means _____.
- A gradually sloped line means _____.
- A steeply sloped line means _____.

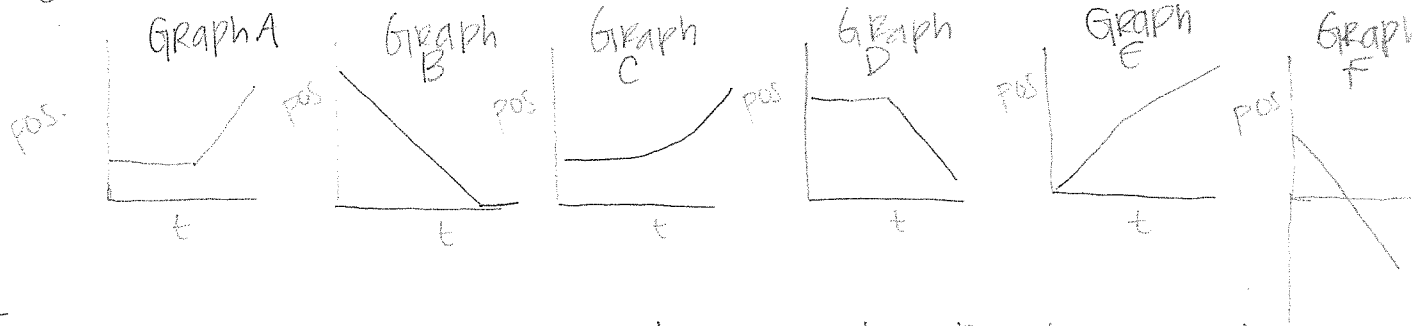


2. The motion of several objects is depicted on the position vs. time graph. Answer the following questions. Each question may have less than one, one, or more than one answer.

- Which object(s) is(are) at rest?
- Which object(s) is(are) accelerating?
- Which object(s) is(are) not moving?
- Which object(s) change(s) its direction?
- Which object is traveling fastest?
- Which moving object is traveling slowest?
- Which object(s) is(are) moving in the same direction as object B?



The graphs below depict the motion of several different objects



The motion of these objects can also be described using words. Analyze the graphs & match them with the verbal descriptions given below.

Verbal Description	Graph Letter
a) The object starts out at rest some distance away from the origin. & then begins to return to the start w/ a constant speed	
b) The object walks back to the start & continues moving in a negative direction with a constant speed	
c) The object is moving quickly with a constant velocity & then moves slowly with a constant velocity	
d) The object starts out moving slowly & then accelerates	
e) The object starts out at rest & then moves away from the origin in a positive direction at a constant speed	
f) The object returns to the origin from some distance away at a constant speed & then remains there at rest	