

Model Problems

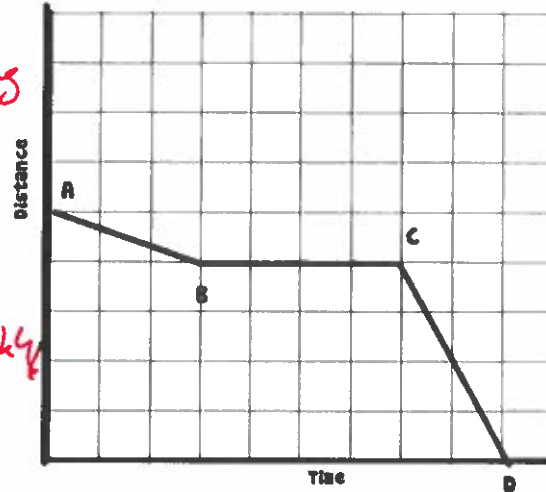
An Airplane is descending to land at the airport. During its descent it had to fly in circles until the landing was cleared of other planes. Explain what is occurring during each of the segments.

1)

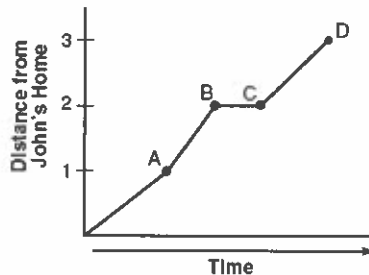
AB: Plane was descending slowly

BC: Plane was flying in circles

CD: Plane descended quickly and landed



2) John left his home and walked 3 blocks to his school, as shown in the accompanying graph.



What is one possible interpretation of the section of the graph from point B to point C?

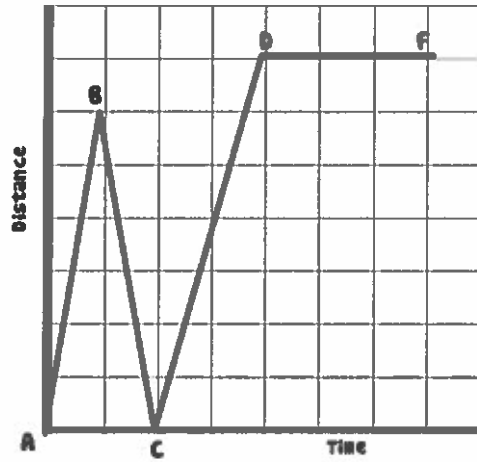
- ~~(1)~~ John arrived at school and stayed throughout the day.
- (2) John waited before crossing a busy street.
- ~~(3)~~ John returned home to get his mathematics homework.
- ~~(4)~~ John reached the top of a hill and began walking on level ground.

Practice Problems

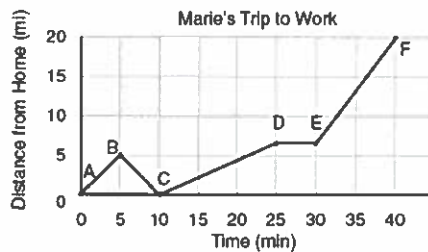
3)

Jen left her house and drove to school in the morning, as shown in the accompanying graph. On her drive to school she realized that she forgot her bookbag and had to return home before driving back to school for a 3 hour class. Explain what is happening during part of the graph below

- AB *She is heading to school*
- BC *She turned around and went back home*
- CD *She went to school (slower)*
- DF *She is at school*



4) The accompanying graph shows Marie's distance from home (A) to work (F) at various times during her drive.



- a Marie left her briefcase at home and had to return to get it. State which point represents when she turned back around to go home and explain how you arrived at that conclusion. **B**
- b Marie also had to wait at the railroad tracks for a train to pass. How long did she wait?

5 minutes