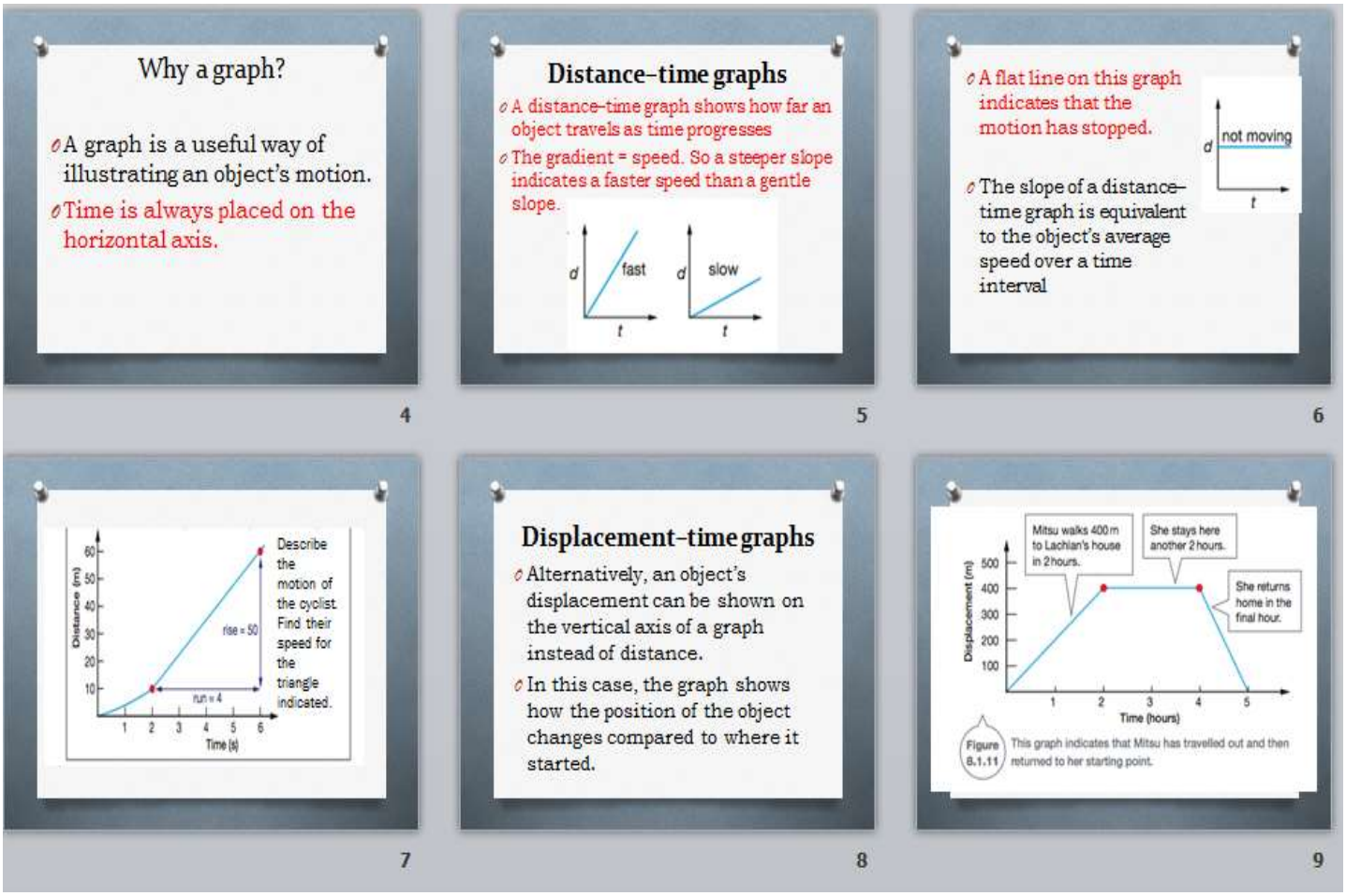
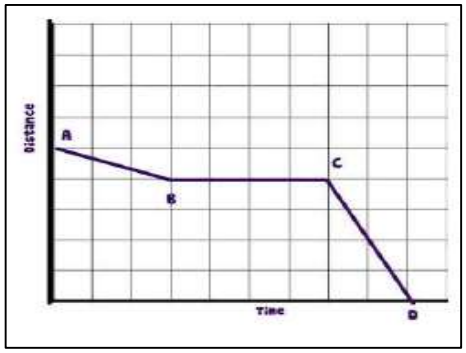
Lesson 4: Distance vs Time Graphs



Problems to Solve

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

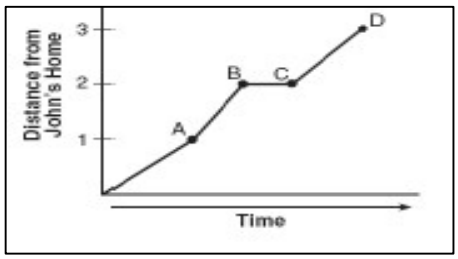


AB

BC

CD

2. John left his home and walked three blocks to school, as shown in the graph below.



Which of the scenarios below is the best explanation for the section of the graph from B to C. Give reasons for your answer

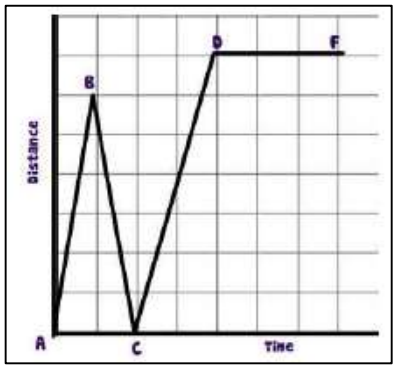
(a) John arrived at school and stayed throughout the day

(b) John waited before crossing a busy street

(c) John returned home to get his maths homework

(d) John reached the top of a hill then began to walk on level ground

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



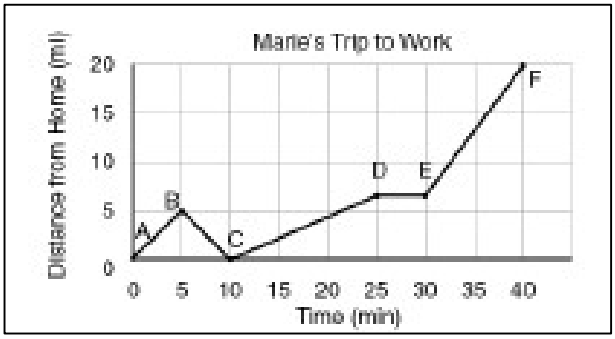
AB

BC

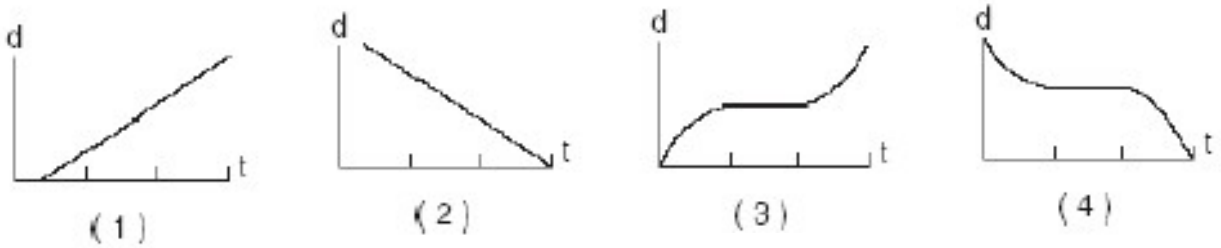
CD

DE

4) The graph below 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 that conclusion

(b) Marie also had to wait at the railroad tracks for a train to pass. How long did she wait?

5. A bug travels up a tree, over a 30-second interval. It travels fast at first and then slows down. It stops for 10 seconds, then proceeds slowly speeding up as it goes. Which sketch best shows the bug's journey. Give reasons for your answer