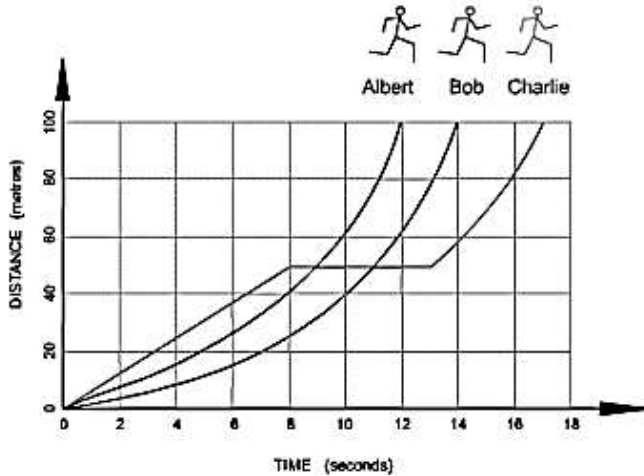


## Lesson: Functions (Day 5) Analyzing Graphs of Various Functions

### Example 1:

3 people raced 100 meters and results were graphed.



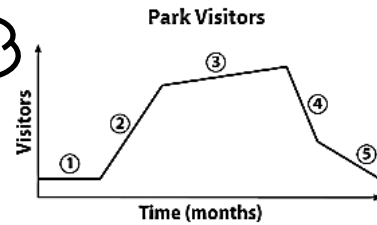
Who won the race?

Who stopped for a break? For how long?

How long did the winner take to win the race?

A roller coaster park is open from May to October each year. The graph shows the number of park visitors over its season.

### Example 2:

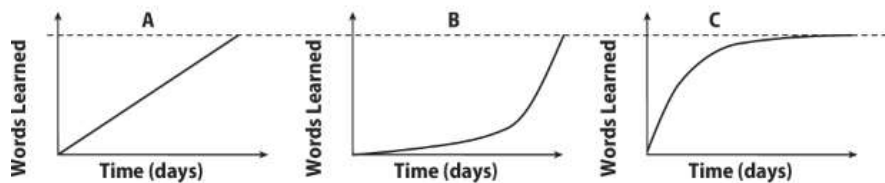


**A** Segment 1 shows that attendance during the opening weeks of the park's season stayed constant. Describe what Segment 2 shows.

**B** Based on the time frame, give a possible explanation for the change in attendance represented by Segment 2.

**C** Which segments of the graph show decreasing attendance? Give a possible explanation.

### Example 3:



Grace, Jet, and Mike are studying 100 words for a spelling bee.

- Grace started by learning how to spell many words each day, but then learned fewer and fewer words each day.
- Jet learned how to spell the same number of words each day.
- Mike started by learning how to spell only a few words each day, but then learned a greater number of words each day.

Match the Graph

Grace \_\_\_\_\_

Jet \_\_\_\_\_

Mike \_\_\_\_\_

### Example 4:

In a lab environment, colonies of bacteria follow a predictable pattern of growth. The graph shows this growth over time. (Explore Activity 1)

1. What is happening to the population during Phase 2?

---



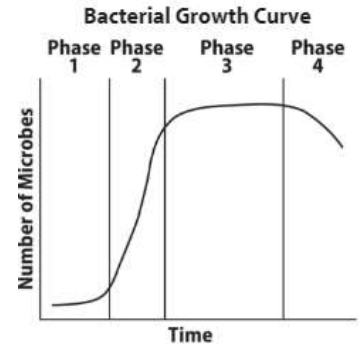
---

2. What is happening to the population during Phase 4?

---

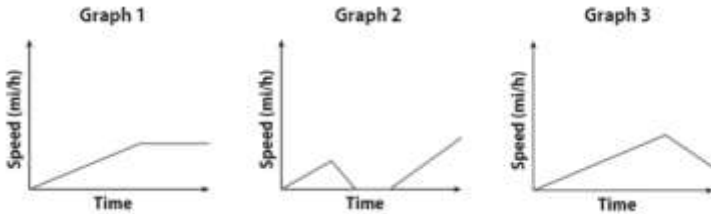


---



### Example 5:

The graphs give the speeds of three people who are riding snowmobiles. Tell which graph corresponds to each situation. (Explore Activity 2)



Chip begins his ride slowly but then stops to talk with some friends. After a few minutes, he continues his ride, gradually increasing his speed.

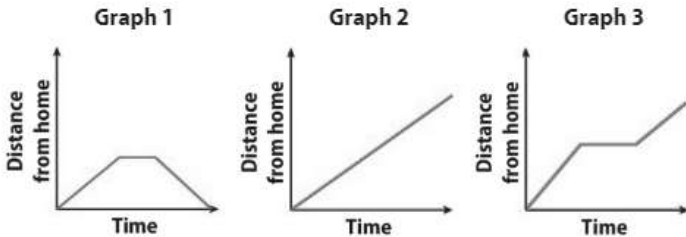
---

Linda steadily increases her speed through most of her ride. Then she slows down as she nears some trees.

---

### Example 6:

Tell which graph corresponds to each situation below.

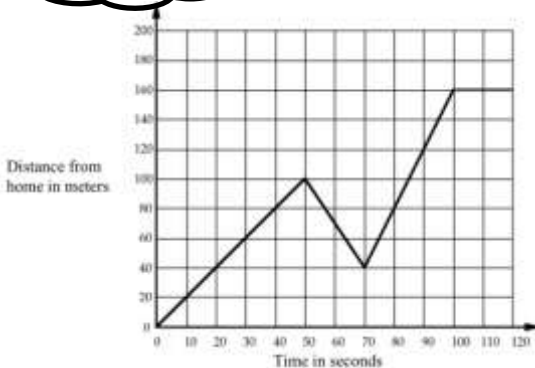


Arnold started from home and walked to a friend's house. He stayed with his friend for a while and then walked to another friend's house farther from home.

Francisco started from home and walked to the store. After shopping, he walked back home.

Celia walks to the library at a steady pace without stopping.

### Example 7:



Every morning Tom walks on a straight road from home to the bus stop. The bus stop is 160 meters away from his home.

- How long did it take Tom get to the Bus Stop?
- What may have happened at 50 seconds?
- What happens at 70 seconds? Compare this to when he left home. Be specific using the numbers on the graph.