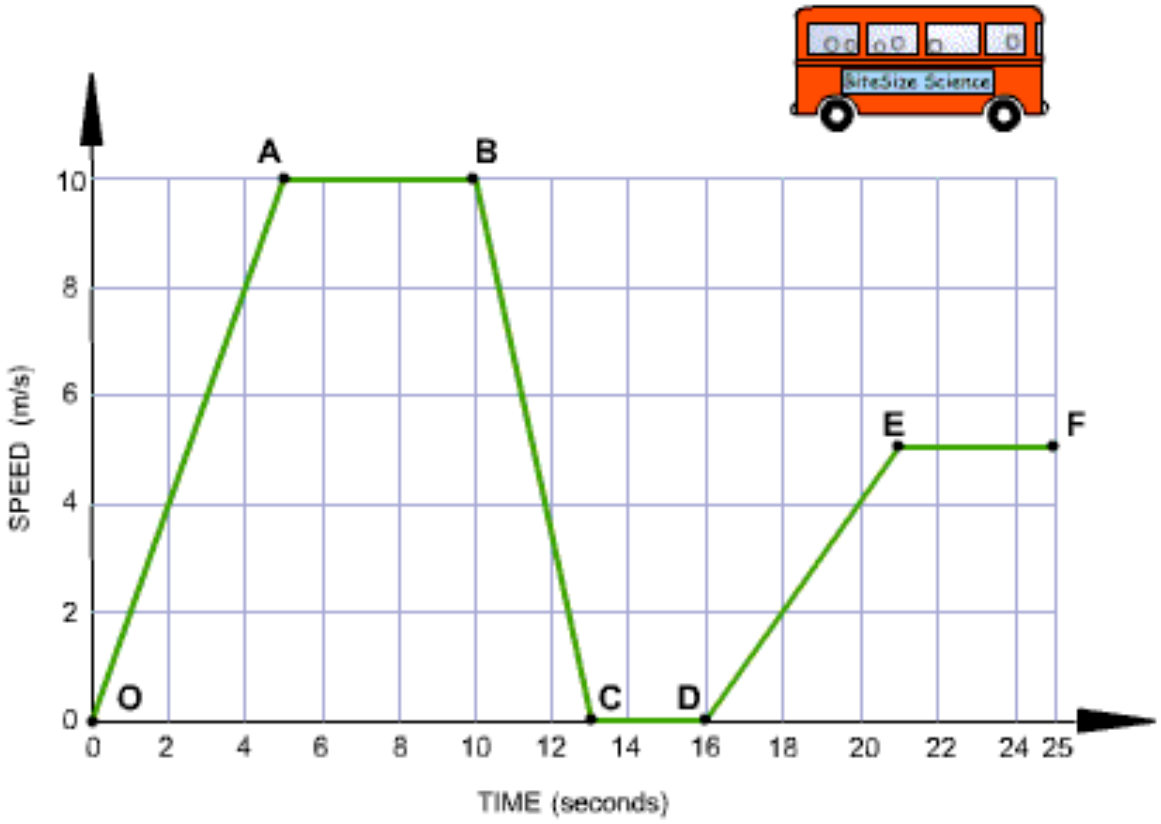
Acceleration Graph Practice



Answer the following questions regarding the graph:

1. Choose the correct word to describe the motion during each part of the journey.

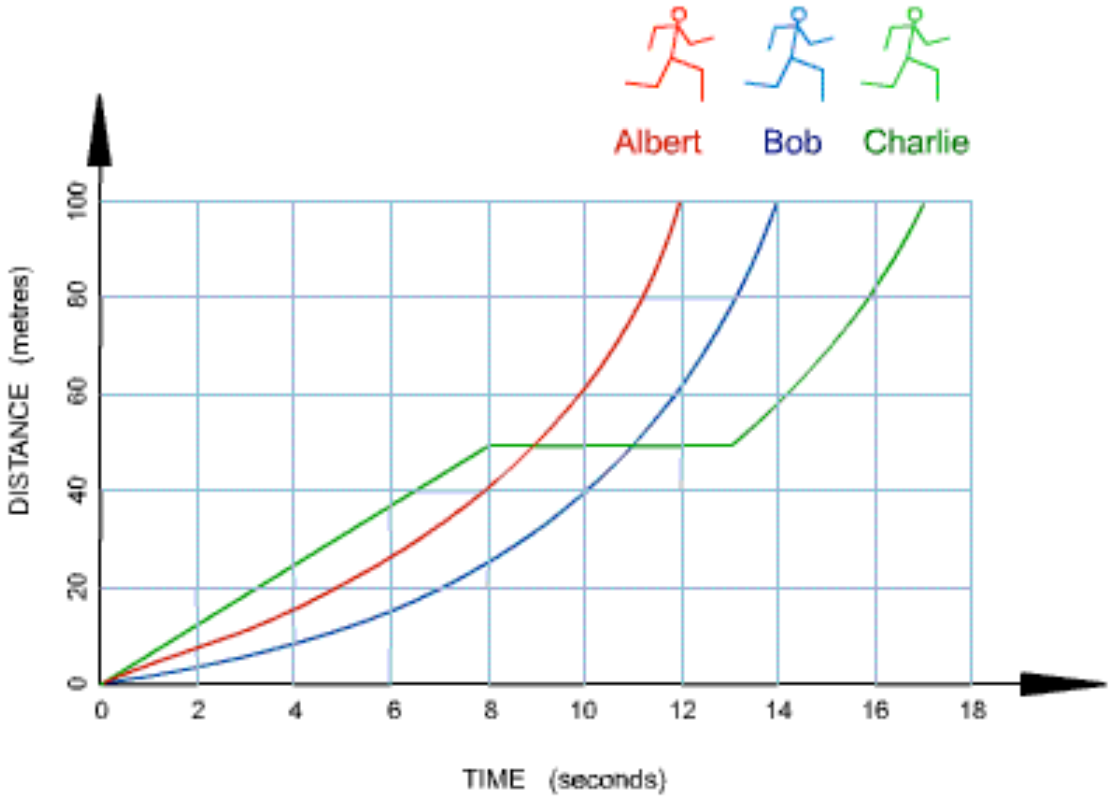
    a. O-A: The bus is _____. Its speed changes from 0 to ___ m/s in ___ seconds.
    b. A-B: The bus is moving at a _____ of 10 m/s for ___ seconds.
    c. B-C: The bus is _____. It goes from 10 m/s to ___ in ___ seconds.
    d. C-D: The bus is _____. It has _____ motion.
    e. D-E: the bus is _____. It's speed increases.
    f. E-F: The bus is moving at a _____ speed of ___ m/s.

2. During which part of the journey was the bus moving fastest?

3. During which part of the journey did the bus have the greatest acceleration?

4. Calculate the acceleration between D and E.

Answer the questions regarding the graph which shows the three runners (Albert, Bob and Charlie) ran a 100 meter race.



5. The graph shows _____.

6. Which runner won the race?

7. Which runner stopped for a rest?
   a. Where did he stop?
   b. How long did he stop?

8. How long did Bob take to complete the race?

9. Calculate Albert's average speed. (HINT: How far did he go compared to his overall time) v=d/t

10. Calculate the accelerations of Bob and Albert. (distance= $1/2at^2 + Vi$ OR $a= \frac{vf-vi}{tf-ti}$

    a) Bob

    b) Albert