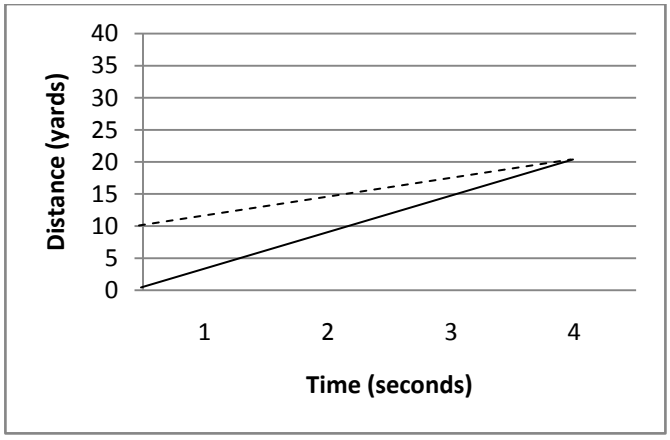
Name_____Period_____Date_____

Distance Time Graphs
Practice Problems

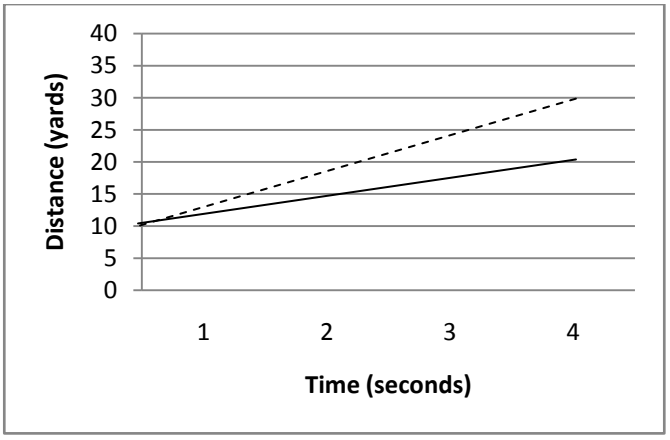
Examine the graphs below:

Runner 1= _____ Runner 2 = _____

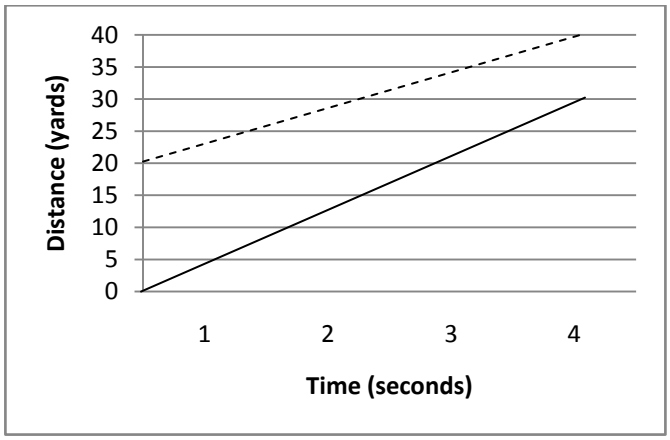
Graph A



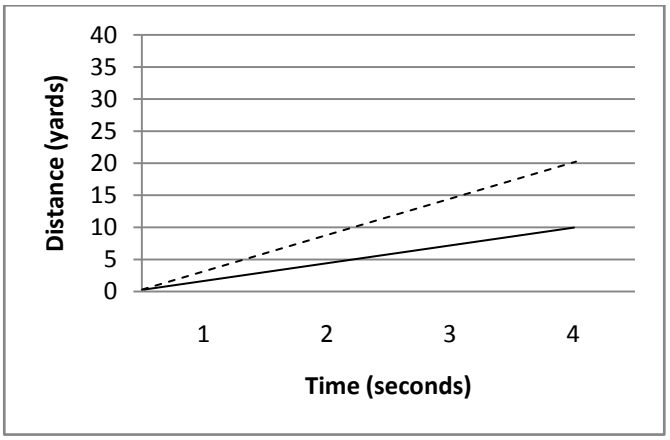
Graph B



Graph C



Graph D

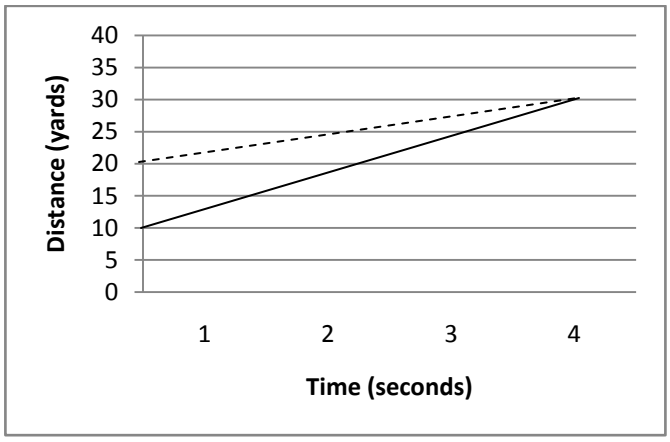


1. Which of the graphs show that one of the runners started 10 yards further ahead of the other?_____
2. Explain your answer.
3. In graph D, which of the runners is faster?_____
4. Calculate the speed of Runner 1 and Runner 2 for Graph D.

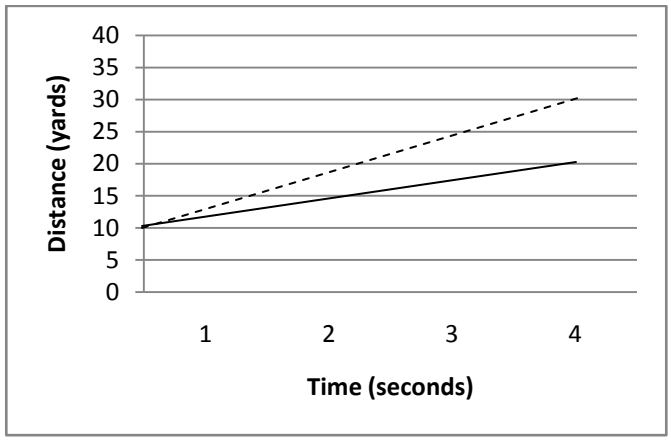
Runner 1	Runner 2

5. Which graph had the fastest runner? How do you know?

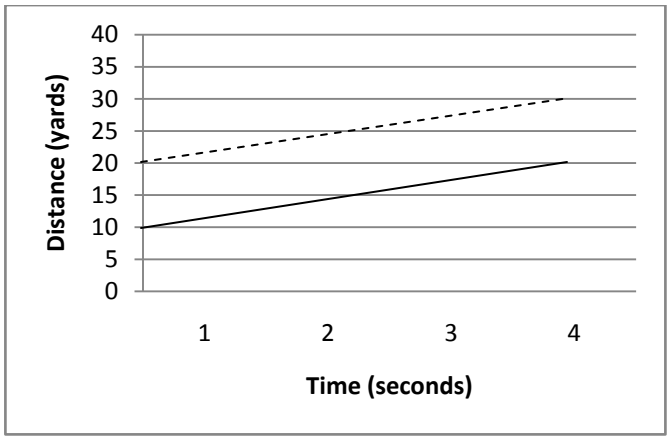
Graph A



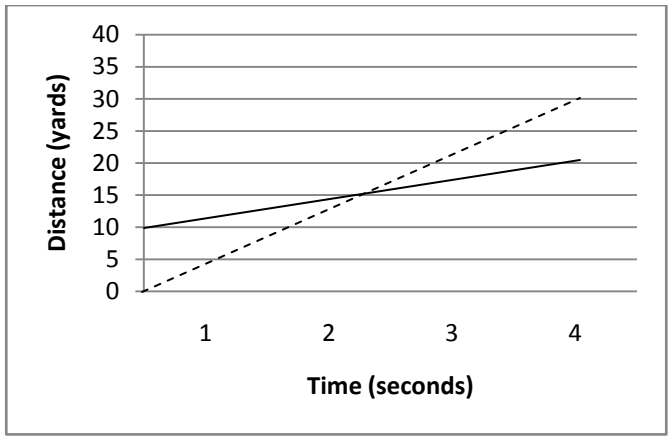
Graph B



Graph C



Graph D



1. In which of the graphs are both runners moving at the same speed?_____

2. Calculate the average speed for Runner 2 in graph B.

3. What is the total distance for Runner 2 in Graph A?_____

4. In Graph B, about how long did it take for Runner 1 to travel between 10 and 20 yards?_____

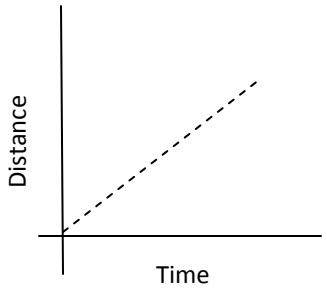
5. Which runner traveled the farthest in Graph D?_____

The distance –time graphs below represent the motion of a car. Match the descriptions with the graphs. Explain your answers.

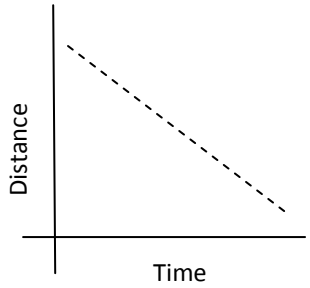
Descriptions:

1. The car stopped.
2. The car is traveling at constant speed.
3. The speed of the car is decreasing.
4. The car is coming back.

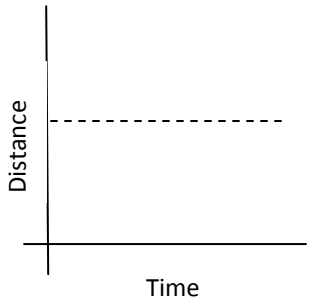
A.



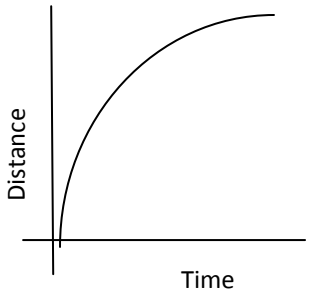
B.



C.



D.

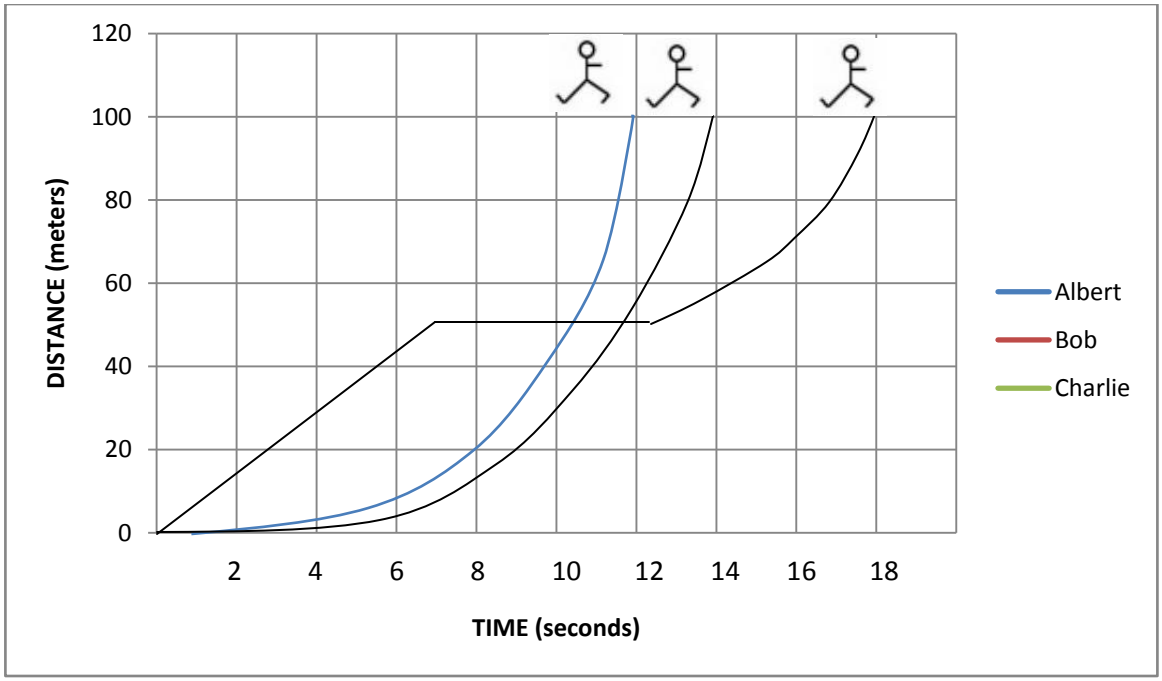


Graph A matches description _____ because_____.

Graph B matches description _____ because_____.

Graph C matches description _____ because_____.

Graph D matches description _____ because_____.



Look at the graph above. It shows how three runners ran a 100-meter race.

1. Which runner won the race?_____
2. Explain your answer.

3. Which runner stopped for a rest?_____
4. Explain your answer.

5. How long was the stop?_____
6. Explain your answer.

7. How long did Bob take to complete the race?_____
8. Explain your answer.

9. Calculate each runner's average speed.
    a. Albert_____
    b. Bob_____
    c. Charlie_____