

## Run/Walk Activity Discussion Questions Answers

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### Discussion Questions Answers

- a) **Which of your graphs should go through the origin?**

All of the graphs should go through the origin since the distance at time zero is zero and both walkers start at the same position

- b) **How would the *Time-Lag versus Distance* graph change if the person walking were to run at a constant average velocity?**

If the person walking were to run at a constant velocity, the Time Lag vs. distance graph would be steeper as they would get farther ahead faster.

- c) **What would be the effect on each graph of one person changing their speed during the test?**

If one person changed their speed during the test, their distance-time graph would change slope at that point. The time Lag graph would also suddenly change in slope, perhaps even having a negative slope.

- d) **What happens to the S-P gap as the distance increases?**

As the distance increases, the gap gets larger.