

Learning Target: I can analyze and interpret data to identify patterns in the relationship between velocity and acceleration.

The Relationship Between Velocity & Acceleration Video Notes

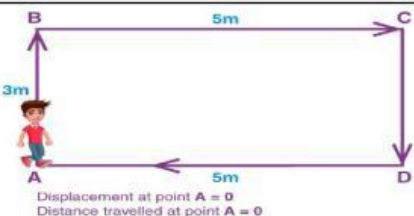


1. What is the difference between speed and velocity? _____
2. A vector is a measurement that includes both _____
3. What is the difference between the speed and velocity equation? _____
4. If Jaden travels 200 meters to the left in 25 seconds. What is his velocity? _____
- If Jaden travels 250 meters to the right in 25 seconds. What is his velocity? _____
-What do the answers to both of these questions include? _____
- What does speed not include? _____
5. Displacement is the total _____ in the _____ of an object along with its _____ or motion.

Quick Checks for Understanding! Take 3 minutes to write your answers. You got this!

1. What is the difference between speed and velocity? _____

2.



What is the person's displacement at point A? _____

What is the person's displacement at point D? _____

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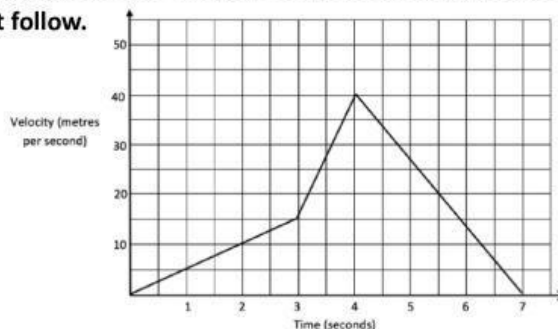
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6. Acceleration is the _____ in an objects _____.
- What is the difference between positive and negative acceleration? _____

7. What does a straight line going upward on a velocity over time graph mean? _____
- How can you tell the blue line going up has more acceleration than the red line going up? _____

-What does a straight line going across mean? _____
- What does a straight line going downward mean? _____

Quick Check for Understanding! Analyze the velocity over time motion graph at 4 minutes in the video and answer the questions that follow.



1. What is the object doing from 0 to 3 seconds? _____
2. What is the object doing from 3 to 4 seconds? _____
3. How is the motion of the object different from 0 to 3 seconds versus 3 to 4 seconds? _____
4. What is the object doing from 4 to 7 seconds? _____
5. Is the object traveling at zero acceleration at any point according to this velocity over time motion graph? How can you tell? _____

Summary

8. In summary, velocity tells us _____
Acceleration tells us _____
9. What is the relationship between velocity and acceleration? _____
10. What is the difference between distance-time graphs versus velocity-time graphs? _____