

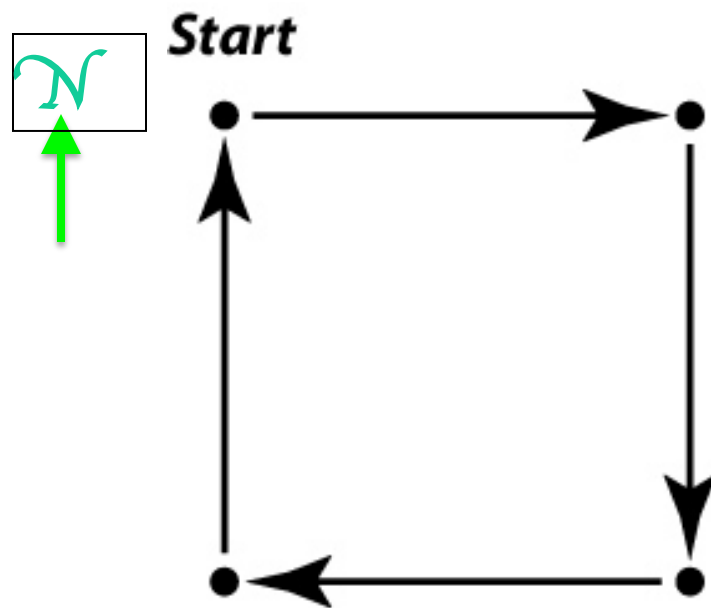
The 1D velocity is defined as $v = \frac{dx}{dt}$
What is true about this velocity?



- A. It is always positive.
- B. It is only negative if x is negative.
- C. It can be positive or negative but only for positive x .
- D. It can be positive or negative for both positive and negative x .



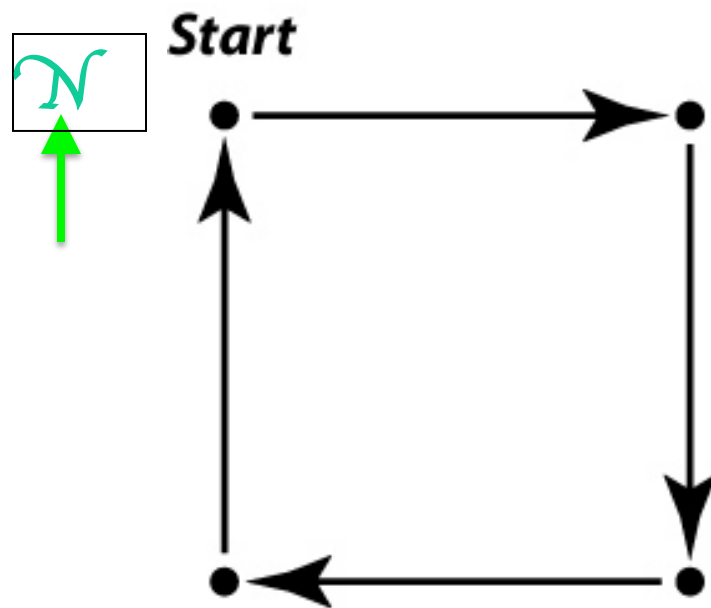
You have already traveled east in your car 100 km in 1 hr and then south 100 km in 2 hrs. To get back home, you then drive west 100 km for 3 hours and then go north 100 km in 4 hours. You would say your average **velocity** for the total trip was



- A. 20 km/hr
- B. 40 km/hr
- C. 60 km/hr
- D. 100 km/hr
- E. None of the above



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