$\qquad$ Date $\qquad$ Class $\qquad$
Key Concept Builder

## Speed and Velocity

Key Concept What are ways velocity can change?
Directions: Answer each question or respond to each statement on the lines below.

1. A race car driver pulls onto a circular track. After 10 seconds, his speed is $200 \mathrm{~km} / \mathrm{h}$. The car travels at a steady speed of $200 \mathrm{~km} / \mathrm{h}$ for 100 seconds and then slows to a stop in another 10 seconds. At what times, during that 120 -second time period, did the car change velocity? Explain your answer.
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2. An airplane is flying from San Francisco to Washington, D.C. During the middle of the flight, it travels 2,000 km in 2.5 hours. What is its speed during that period?
3. Another airplane is flying in the opposite direction. It covers the same distance in exactly two hours. What is its velocity?
$\qquad$
4. Draw arrows representing the velocities of the two planes.

| First plane | Second plane |
| :--- | :--- |
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