Name: $\qquad$
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## Chapter 2.3 Homework

Conceptual Physics
Parent Signature: $\qquad$

## Reviewing Concepts

13. The slope of a velocity vs. time graph is equal to the object's $\qquad$
14. A graph is made of the velocity vs. time of a plane as it flies from San Francisco to the Kahului Airport on Maui. How could the displacement of the plane be calculated from the graph? (1)

## Solving Problems

12. View the graph on page 49 in your text, then answer the following:
a. Calculate the velocity from the position vs. time graph. Show your work. (1)
b. Draw the velocity vs. time graph showing the same motion. (1)

13. Draw a velocity vs. time graph for a car that starts at rest and steadily accelerates until it is moving at $40 \mathrm{~m} / \mathrm{s}$ after 20 s . Then calculate the car's acceleration and displacement during the first 20 s. (3)

14. Draw a velocity vs. time graph for an object accelerating from rest with a constant acceleration of $2 \mathrm{~m} / \mathrm{s}^{2}$. (1)

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