AP Physics 1 Review Questions

Integrating Content, Inquiry and Reasoning

- 1. Consider a ball rolled or kicked up a hill at a constant velocity. Draw *p*–*t* and *v*–*t* graphs that represent the ball's motion.
- 2. Consider the same ball rolled down the hill from an initial, stationary state. Draw p-t and v-t graphs that represent the ball's motion.
- 3. What is the difference between instantaneous and average velocity?
- 4. Calculate the instantaneous velocity at 5 seconds as well as the average velocity from 8 to 11 seconds using the graph shown below.



5. What information, if any, can be gathered from the areas under curves on *p*-*t*, *v*-*t*, and *a*-*t* graphs?

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