

AP Calculus AB - Rates of Change in Context and Straight-Line Motion - Quiz

Common Core AP CALC AB 4.1, AP CALC AB 4.2, AP CALC AB 4.3 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

Test yourself on interpreting derivatives in context, and straight-line motion with position, velocity, acceleration and speed with 10 multiple-choice questions. Pick one answer for each question, then read the explanation to see why it is right and which common mistake the other choices represent.

AP Calculus AB · Common Core State Standards: **AP CALC AB 4.1, AP CALC AB 4.2, AP CALC AB 4.3**

Remember

- A derivative has units of output per input, such as dollars per pencil or feet per second.
- Velocity is $s'(t)$, acceleration is $v'(t)$, and speed is the absolute value of velocity.
- Speed increases when velocity and acceleration have the same sign.
- Total distance adds the distances between turning points, where velocity changes sign.