

AP Calculus AB - Increasing, Decreasing and the First Derivative Test - Quiz

Common Core AP CALC AB 5.4, AP CALC AB 5.5, AP CALC AB 5.6 · maths-pdf.fr/en/

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

Test yourself on increasing and decreasing intervals, sign charts of the derivative, the First Derivative Test and absolute extrema 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 5.4, AP CALC AB 5.5, AP CALC AB 5.6**

Remember

- A positive f' means f is increasing; a negative f' means f is decreasing.
- Sign changes of f' can occur only at critical numbers or where f' is undefined.
- First Derivative Test: $+$ to $-$ gives a relative maximum; $-$ to $+$ gives a relative minimum.
- A critical number without a sign change, such as $x = 0$ for x^3 , is not an extremum.