

AP Calculus AB - Riemann Sums and the Definite Integral - Quiz

Common Core AP CALC AB 6.1, AP CALC AB 6.2, AP CALC AB 6.3 · maths-pdf.fr/en/

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

Test yourself on Riemann sums, trapezoidal sums, the definite integral as signed area and accumulation of change 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 6.1, AP CALC AB 6.2, AP CALC AB 6.3**

Remember

- Riemann sum: add $f(\text{sample point})$ times the width over all subintervals.
- For an increasing function a left sum underestimates and a right sum overestimates; the reverse for a decreasing function.
- The trapezoidal sum equals the average of the left and right sums when widths are equal.
- The definite integral is the limit of Riemann sums and gives signed area.