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Math 52

FTOC

**1. How does Newton's proof demonstrate the FTOC? Is his explination clear? Is it correct?**

Newton's proff demontates the Fundamental Theorem of Calculus (FTOC) by showing a way to find the area under a curve. Newton calculates the area under the curve using small rectangles. Newtons version does not show how to calculate the sum of the small rectangles as easily as the modern mathematical language version. His explination is not as clear as the example expressed in modern mathematical language. His explination is correct because Newton was able to find the area under the curve using his method.

**2. Where does Newton's original proff use the MVT4I?**

Newtons version uses the mean value theorem for integrals when he calculates the area of the rectangle under the curve (the area of rectangle BBetaHK). He calculates the average value of f(x) over the interval [a, b] just like the MVT4I.

**3.How close is Newton's version of the FTOC to the one you learned about in Math 51?**

Newton's version of the FTOC is simialar to the version I learned about in Math 51 because Newton uses the variable 'o' to be an infinitesimal segment. This is similar to what we did using the Math 51 version using limits.