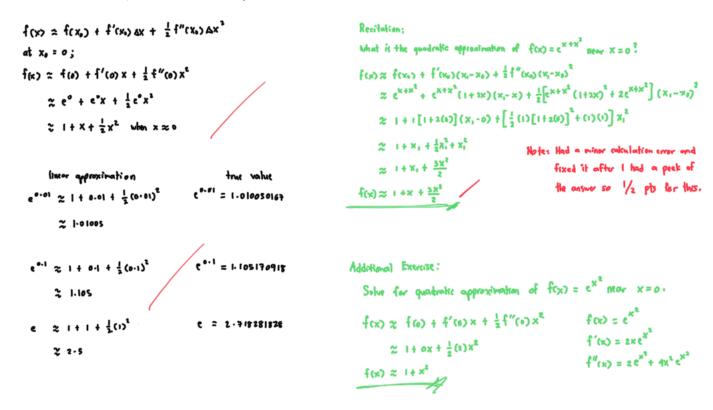
Comparing Quadratic Approximations to Calculator Computations

In a previous worked example, we explored linear approximations to the sine function at the point x = 0. In this example, we use the quadratic approximation for e^x to calculate values of the exponential function near x = 0 and again compare the results to decimal approximations on a scientific calculator.

Find the linear approximation to e^x at the point x = 0 and use your answer to approximate the values of $e^{.01}$, $e^{.1}$ and e. Check your answer on a calculator.



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