

Quiz 4

Nov 20, 2014

Show all details.

1. Find $\lim_{x \rightarrow 0} \left(\frac{1}{x} - \frac{1}{\sin x} \right)$.
2. Find $\lim_{x \rightarrow \infty} \frac{e^{x^2}}{xe^x}$.
3. Find the point on $y = \sqrt{x}$, $x \geq 0$ that is closest to $(2, 0)$. Explain why the answer you have is actually a global minimum.
4. Write down Newton's method that can be used to find $\sqrt[3]{2}$. Need not give the numerical value.
5. Find $\int x^2 + 2^x dx$.

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