

Math101 Term181
Sec13 Quiz 2

Name	ID	Sr
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Q1 (5 points) Let $f(x) = \frac{3}{\sqrt{x+14}}$. Find the largest number $\delta > 0$ such that if $0 < |x + 5| < \delta$ then $|f(x) - 1| < 0.5$ (Show your work)

Q2) (5 points) Show that the graphs of the functions $f(x) = e^{-x}$ and $g(x) = 2 - x$ intersect. (Name the theorem)

Math101 Term181
Sec17 Quiz 2

Name	ID	Sr
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Q1 (5 points) Let $f(x) = \frac{3}{\sqrt{x+10}}$. Find the largest number $\delta > 0$ such that if $0 < |x + 1| < \delta$ then $|f(x) - 1| < 0.5$ (Show your work)

Q2)(5 points) Where is $f(x) = \frac{\sin\left(\frac{1}{x-5}\right) + \sqrt{x^2-16}}{x^2-6x-7}$ continuous ?
(Show your work)

Math101 Term181
Sec18 Quiz 2

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Q1 (5 points) Let $f(x) = \frac{3}{\sqrt{x+11}}$. Find the largest number $\delta > 0$ such that if $0 < |x + 2| < \delta$ then $|f(x) - 1| < 0.5$ (Show your work)

Q2(5points) For what values of a, b is the following function continuous on $[-2,5]$

$$f(x) = \begin{cases} -2x + 5a - \frac{3}{5} & \text{if } -2 \leq x < -1 \\ 2a + b & \text{if } x = -1 \\ x^2 + 3b - 3 & \text{if } -1 < x \leq 5 \end{cases}$$

(Show your work)

Math101 Term181
Sec21 Quiz 2

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Q1 (5 points) Let $f(x) = \frac{3}{\sqrt{x+13}}$. Find the largest number $\delta > 0$ such that if $0 < |x + 4| < \delta$ then $|f(x) - 1| < 0.5$ (Show your work)

Q2) (5 points) Show that there is a root for the equation $\ln(3x^2 - x + 1) = 3$ (Name the theorem)