

Section 2.2 Homework

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0.1 2.2 HW Answers

Question 1: See HW

Question 2: See HW

Question 3: Use the graph of the function f to state the value of each limit, if it exists. (If an answer does not exist, enter DNE.)

$$f(x) = \frac{e^{1/x} - 5}{e^{1/x} + 1}.$$

Solution:



a.) $\lim_{x \rightarrow 0^-} f(x)$

plug in a value below 0 that's close to 0, say **-0.25**, this returns the value -4.89, so we can see $f(x)$ is getting closer to **5**

b.) $\lim_{x \rightarrow 0^+} f(x)$

Plug in a value above 0 that's close to 0, say **0.25**, this returns 0.89, so we can see that $f(x)$ is getting closer to **1**

a and b were not the same values so **c** is DNE

Question 4: just plug in the values to fill in the table and then deduce the limit