

Quiz 3  
2/28/2023

1. Find the limit

$$\lim_{x \rightarrow 1} \frac{x^2 + x - 2}{x^3 + x^2 + x + 9}$$

2. Find the limit

$$\lim_{x \rightarrow 0} \frac{e^x - x - 1}{2x^2}$$

3. Find the limit

$$\lim_{x \rightarrow 0^+} x^2 \ln x$$

using the change of variable  $t = \frac{1}{x}$ .