

Name: _____

1. $\lim_{x \rightarrow 0} \frac{\tan(x)}{x} =$

2. $\lim_{x \rightarrow 1} \log_2 \left(\frac{x^2 - 1}{4x - 4} \right) =$

3. $\lim_{x \rightarrow \pi} e^{\sin(x)} =$

4. State the intervals on which the function $f(x) = \sqrt{\tan^{-1}(x)}$ is continuous.

Name: _____

1. $\lim_{x \rightarrow 0} \frac{\pi \sin(x)}{4x} =$

2. $\lim_{x \rightarrow 0} \log_2(e^x + 15) =$

3. $\lim_{x \rightarrow 4} \cos\left(\frac{3\pi}{x}\right) =$

4. State the intervals on which the function $f(x) = \frac{x^2 - 1}{x^2 - x}$ is continuous.

Name: _____

1. $\lim_{x \rightarrow 0} \frac{1 - \cos(x)}{x} =$

2. $\lim_{x \rightarrow \pi/3} 9^{\cos(x)} =$

3. $\lim_{x \rightarrow 2\pi} \log_2(8 \cos(x)) =$

4. State the intervals on which the function $f(x) = \frac{\sin(x)}{x}$ is continuous.

Name: _____

1. $\lim_{x \rightarrow 0} \frac{1}{x \csc(x)} =$

2. $\lim_{x \rightarrow 0} \log_2 \left(\frac{4 \sin(x)}{x} \right) =$

3. $\lim_{x \rightarrow 0} \cos(\pi e^x) =$

4. State the intervals on which the function $f(x) = \frac{1}{e^x - 1}$ is continuous.