

$$f(x) = \frac{e^{3x} - 1}{x}$$

x	$\frac{e^{3x}-1}{x}$
-.1	2.5918
-.01	2.9554
-.001	2.9955
-.0001	2.9995
-.00001	2.999955

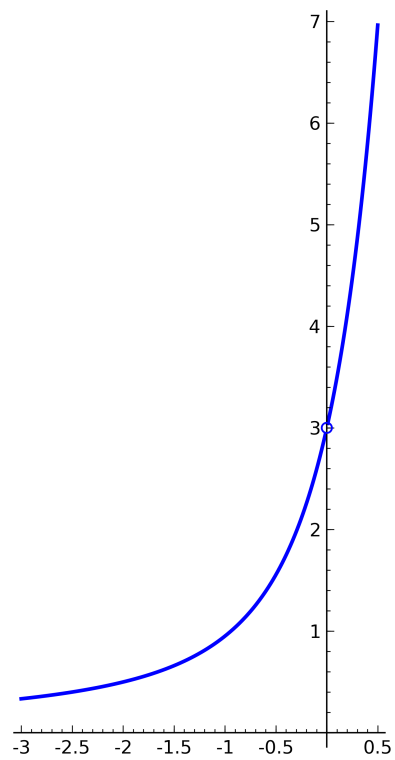
x	$\frac{e^{3x}-1}{x}$
-.1	2.5918
-.01	2.9554
-.001	2.9955
-.0001	2.9995
-.00001	2.999955

x	$\frac{e^{3x}-1}{x}$
.1	3.4986
.01	3.0455
.001	3.0045
.0001	3.00045
.00001	3.000045

x	$\frac{e^{3x}-1}{x}$	x	$\frac{e^{3x}-1}{x}$
-.1	2.5918	.1	3.4986
-.01	2.9554	.01	3.0455
-.001	2.9955	.001	3.0045
-.0001	2.9995	.0001	3.00045
-.00001	2.999955	.00001	3.000045

Guess: $\lim_{x \rightarrow 0} \left(\frac{e^{3x} - 1}{x} \right) = 3$

$$f(x) = \frac{e^{3x} - 1}{x}$$



$$f(x) = \sin\left(\frac{\pi}{x}\right)$$

x	$\sin\left(\frac{\pi}{x}\right)$
$-.1$	0
$-.01$	0
$-.001$	0
$-.0001$	0
$-.00001$	0

x	$\sin\left(\frac{\pi}{x}\right)$
-.1	0
-.01	0
-.001	0
-.0001	0
-.00001	0

x	$\sin\left(\frac{\pi}{x}\right)$
.1	0
.01	0
.001	0
.0001	0
.00001	0

x	$\sin\left(\frac{\pi}{x}\right)$	x	$\sin\left(\frac{\pi}{x}\right)$
-.1	0	.1	0
-.01	0	.01	0
-.001	0	.001	0
-.0001	0	.0001	0
-.00001	0	.00001	0

Guess: $\lim_{x \rightarrow 0} \left(\sin\left(\frac{\pi}{x}\right) \right) = 0$

$$f(x) = \sin\left(\frac{\pi}{x}\right)$$

