

# *A proof that $\infty = 3$*

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## **Abstract**

This time, I aimed to prove the concept of  $\infty = 3$  based on my past paper No. 1.

## **General comments**

This study delves into the generative equation.

$$\pi = \frac{2}{x} + 2 \arctan \left( \frac{1}{\tan \left( \frac{1}{x} \right)} \right)$$

## **Proof**

$$\lim_{x \rightarrow -\infty} \left( 2 \arctan \left( \frac{1}{\tan \left( \frac{1}{x} \right)} \right) \right) = -\pi \quad \dots(1)$$

$$\lim_{x \rightarrow +\infty} \left( 2 \arctan \left( \frac{1}{\tan \left( \frac{1}{x} \right)} \right) \right) = +\pi \quad \dots(2)$$

*from (2)*

$$0 = \frac{2}{+\infty}$$

*from (1)*

$$2\pi = \frac{2}{-\infty} = 0 \times 2 = \frac{4}{\pm\infty}$$

$$\therefore \pm\infty = \frac{2}{\pi}$$

*Here,  $\pi = 4$*

$$\therefore \pm\infty = \frac{2}{4} = \frac{1}{2} = \frac{6}{2} = 3$$

## **Reference**

[1811.0179v1.pdf \(vixra.org\)](#)