

COS, SIN, CSC, SEC

$$\text{PERIOD} = \frac{2\pi}{b}$$

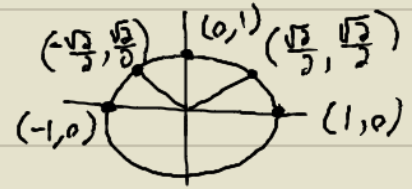
TAN, cot

$$\text{PERIOD} = \frac{\pi}{b}$$

1. $y = 2 \text{TAN} \left(\frac{1}{4}x \right)$

$$\text{TAN} = \frac{y}{x}$$

$$\text{PERIOD} = \frac{\pi}{\frac{1}{4}} = \pi \cdot \frac{4}{1} = 4\pi$$



X | $y = 2 \text{TAN} \left(\frac{1}{4}x \right)$

ZERO	0	$2 \text{TAN} \left(\frac{1}{4} \cdot 0 \right) = 2 \text{TAN} 0 = 2(0) = 0$
$\frac{1}{4}$ PERIOD	π	$2 \text{TAN} \left(\frac{1}{4} \cdot \pi \right) = 2 \text{TAN} \frac{\pi}{4} = 2(1) = 2$
$\frac{1}{2}$ PERIOD	2π	$2 \text{TAN} \left(\frac{1}{4} \cdot 2\pi \right) = 2 \text{TAN} \frac{\pi}{2} = \text{UNDEFINED}$
$\frac{3}{4}$ PERIOD	3π	$2 \text{TAN} \left(\frac{1}{4} \cdot 3\pi \right) = 2 \text{TAN} \frac{3\pi}{4} = 2(-1) = -2$
PERIOD	4π	$2 \text{TAN} \left(\frac{1}{4} \cdot 4\pi \right) = 2 \text{TAN} \pi = 2(0) = 0$

