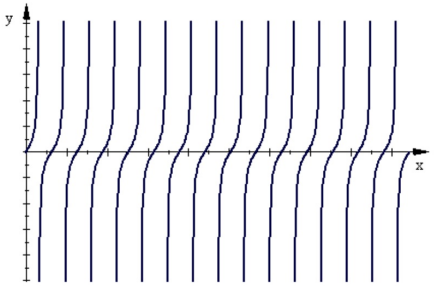
**Bellwork Tuesday, April 15, 2014**

1. Write the equation of this tangent function. The window is 0 to $3\pi$

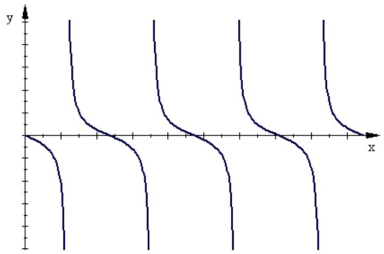


period $\frac{3\pi}{15} = \frac{\pi}{5}$

$b = \frac{\pi}{\frac{\pi}{5}} = \pi \cdot \frac{5}{\pi} = 5$

$y = \tan 5x$

2. Write the equation of this tangent function. The window is 0 to $\frac{3\pi}{2}$



$\frac{\frac{3\pi}{2}}{4} = \frac{3\pi}{2} \cdot \frac{1}{4} = \frac{3\pi}{8}$

$b = \pi \cdot \frac{8}{3\pi} = \frac{8}{3}$

$y = -\tan \frac{8x}{3}$

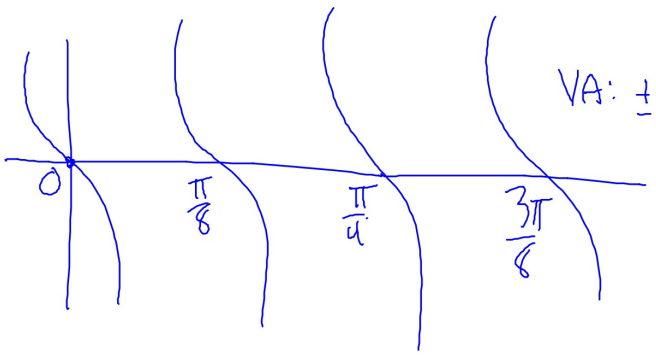
3. Find the location of 4 VA and 4 zeros of this tangent function:

$y = -\tan 8x$

period $= \frac{\pi}{8}$

Zeros: $0, \pm\frac{\pi}{8}, \pm\frac{\pi}{4}$

VA: $\pm\frac{\pi}{16}, \pm\frac{3\pi}{16}$,




4. Find the location of 4 VA and 4 zeros of this tangent function:

$y = \tan \frac{7x}{5}$

period $\frac{5\pi}{7}$

Zeros: $0, \pm\frac{5\pi}{7}, \pm\frac{10\pi}{7}$

VA: $\pm\frac{5\pi}{14}, \pm\frac{15\pi}{14}$