

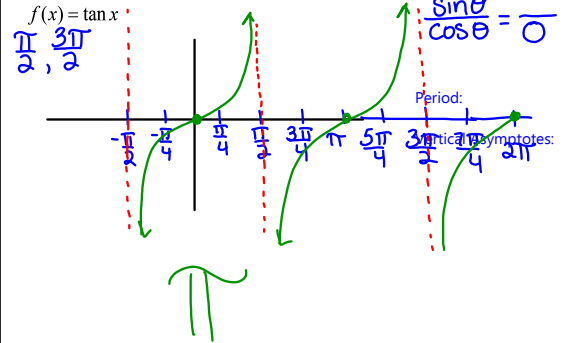
Make sure you have a graphing calculator  
 Any questions from Friday night? 19, 29, 25, 35

$$f(x) = \sec x$$

$$= \frac{1}{\cos x}$$

Sep 29-4:08 PM

Q: For what angles (between 0 and 2pi) is tangent undefined?



Sep 24-5:52 PM

$$y = a \tan(bx - c)$$

Asymptotes:

$$bx - c = \frac{\pi}{2}$$

$$bx - c = \frac{3\pi}{2}$$

Period:

$$\frac{\pi}{b}$$

Amplitude:

$$|a|$$



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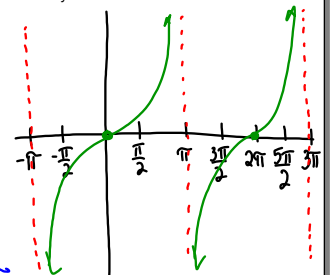
Example  
 Sketch the following graph by hand; then check it on your calculator.

$$y = \tan \frac{x}{2}$$

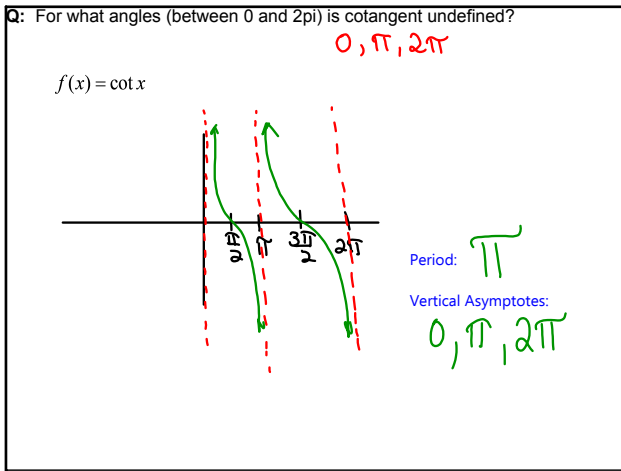
amp = 1

asymptotes  $\frac{x}{2} = \frac{\pi}{2}$   
 $x = \pi$   
 $\frac{x}{2} = \frac{3\pi}{2}$   
 $x = 3\pi$

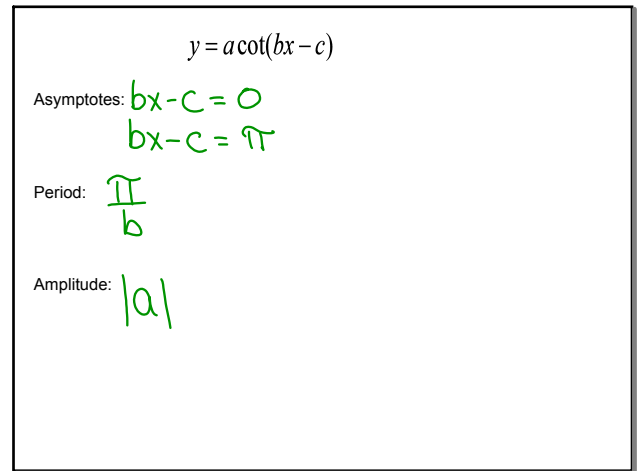
period:  $\frac{\pi}{\frac{1}{2}} = 2\pi$



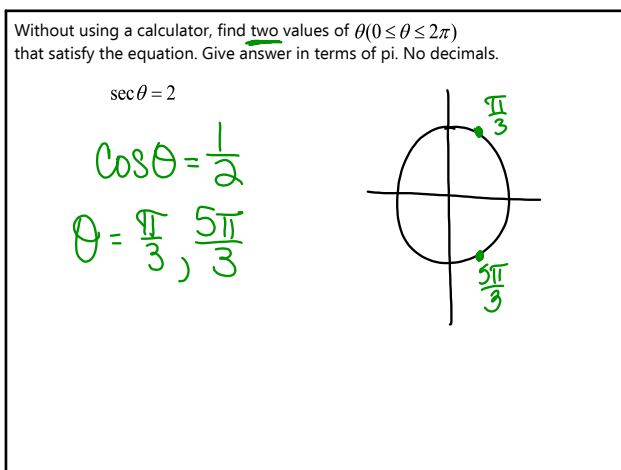
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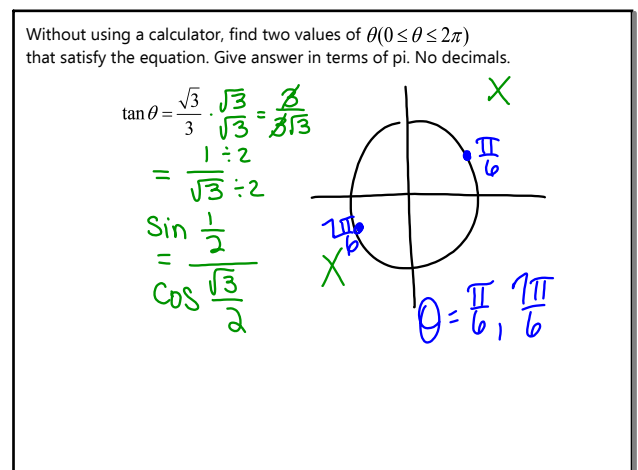
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Sep 29-4:23 PM



Sep 29-4:22 PM

**You need to know these:**

Period for transformations of sine, cosine, cosecant, and secant:

$$2\pi$$

Period for transformations of tangent and cotangent:

$$\pi$$

2 asymptotes for transformations of tangent:

$$\frac{\pi}{2}, \frac{3\pi}{2}$$

2 asymptotes for transformations of cotangent:

$$0, \pi$$

**HOMEWORK**...the last of the trig graphs,  $y=\tan(x)$  &  $y=\cot(x)$ **4.6 (p. 316):** 7, 15, 17, 39, 49, 55, 57, 59**p. 295:** 90-94 (even)

Sep 29-4:24 PM

Sep 25-5:00 PM