

p. 44  
 (37)  $\ln y = 2t + 4$   
 $e^{2t+4} = y$   
 (33)  $1.045^t = 2$   
 $t = \frac{\ln 1.045 = \ln 2}{\ln 1.045}$   
 $y_1 = 1.045^t = 2$   
 $y_2 = 2$

Sep 15-1:15 PM

Q: Why do mathematicians like parks?  
 A: It's because of all of the natural logs.

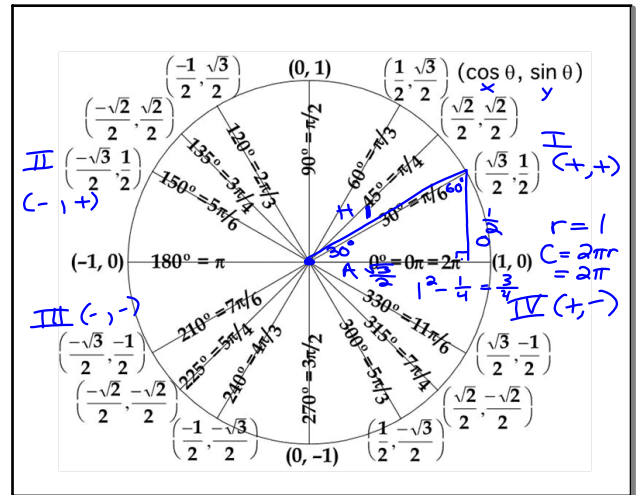
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### 1-6 Trig Functions

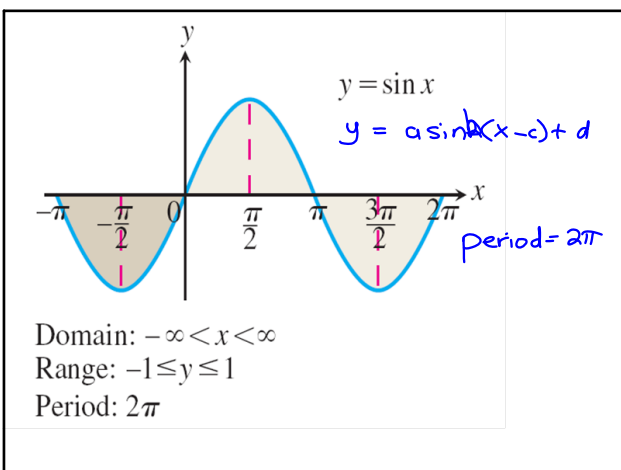
Learning Objectives:

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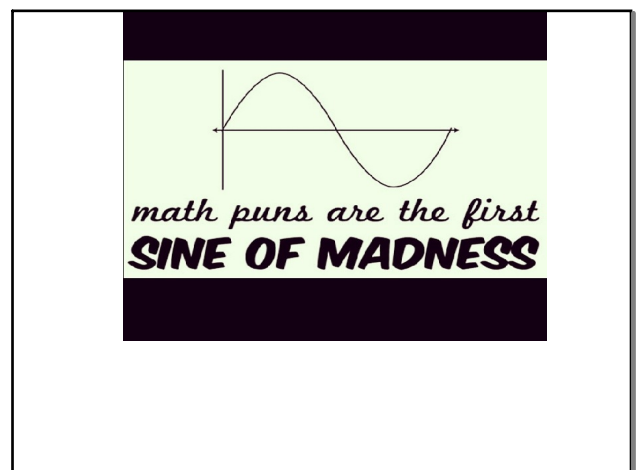
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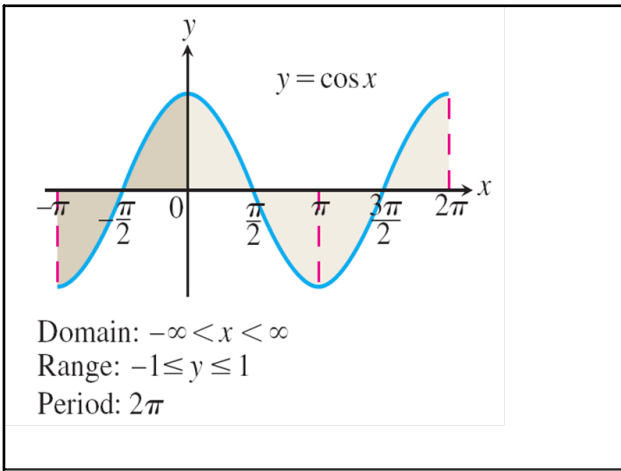
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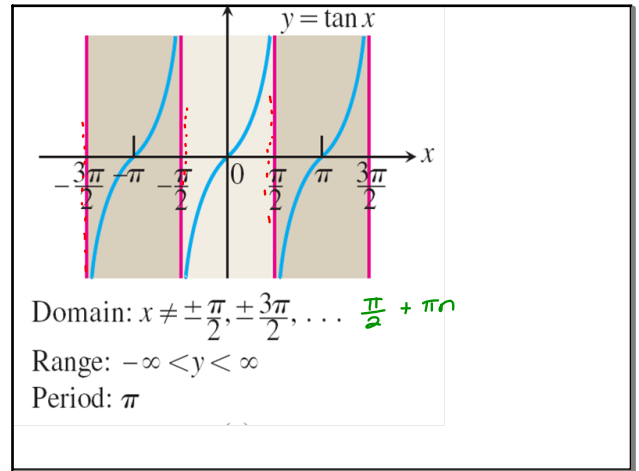
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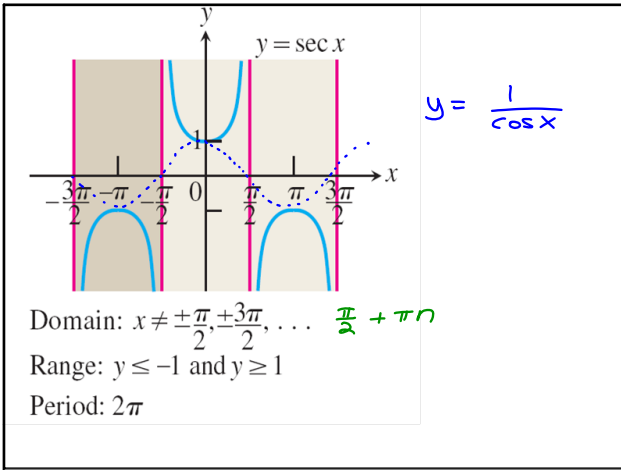
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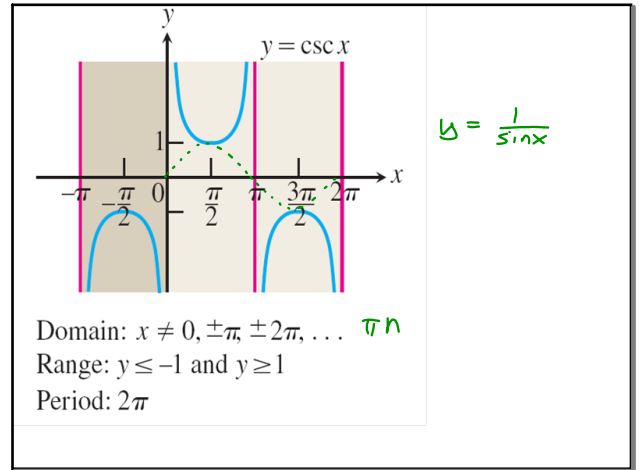
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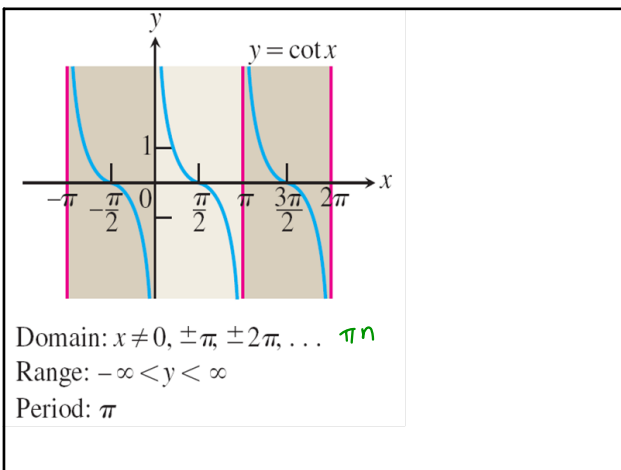
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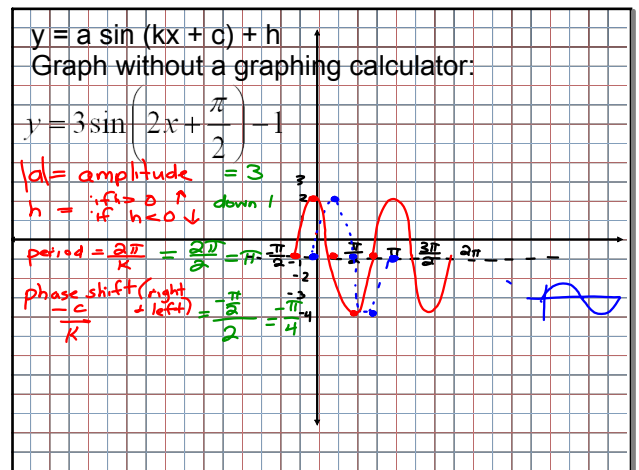
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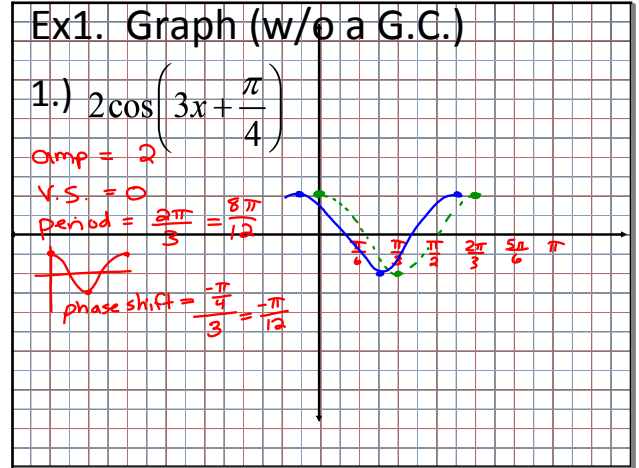
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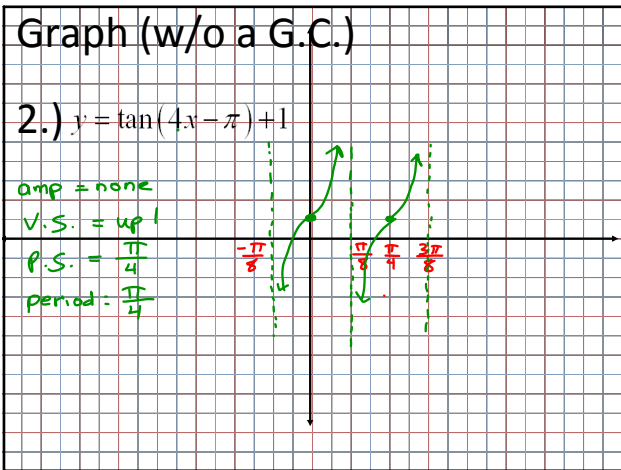
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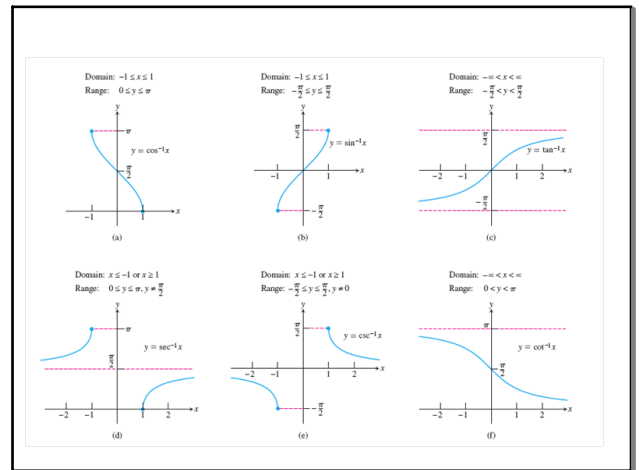
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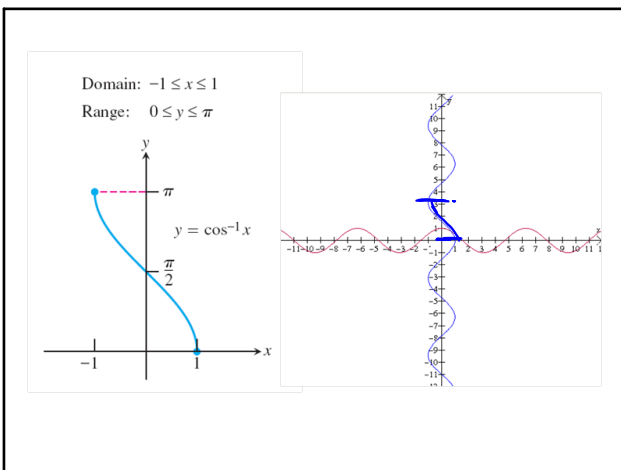
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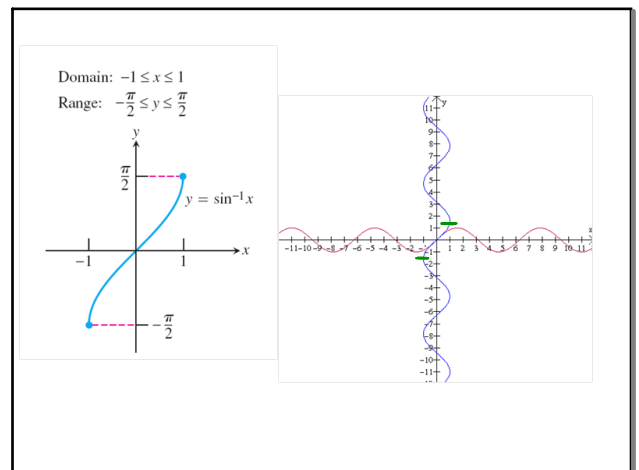
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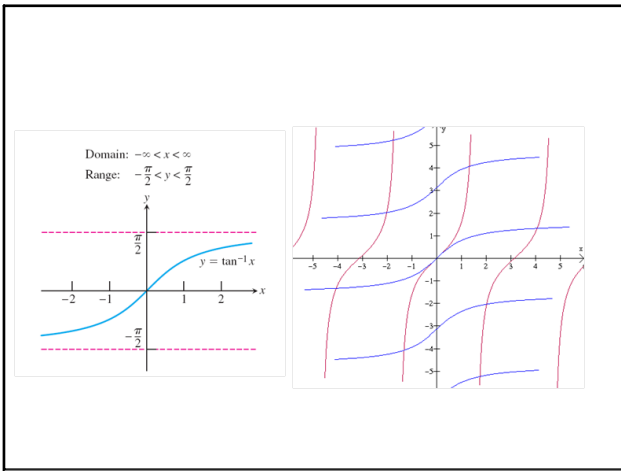
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Sep 4-9:33 AM

Ex2. Solve for the specified interval

1.)  $2 \cos x - \sqrt{3} = 0$  all values of  $x$   
 $\cos x = \frac{\sqrt{3}}{2}$   $\frac{\pi}{6} + 2\pi n$   
 $\frac{11\pi}{6} + 2\pi n$

2.)  $\sqrt{3} \tan x - 3 = 0$   $0 \leq x \leq 2\pi$   
 $\tan x = \frac{3/\sqrt{3}}{\sqrt{3}/\sqrt{3}} = \sqrt{3}$   $\frac{\pi}{3}, \frac{4\pi}{3}$   
 $60^\circ, 240^\circ$   $\tan x = \frac{\sin x}{\cos x}$

3.)  $\sqrt{2} \sin x + 2 = 1$   $-\frac{\pi}{2} \leq x \leq \frac{\pi}{2}$   
 $\sin x = \frac{-1}{\sqrt{2}} = -\frac{\sqrt{2}}{2}$   $-\frac{\pi}{4}$

Sep 4-9:33 AM

## Homework

pg 52 # 7, 12, 13, 16, 18, 24, 31-36, 52-55

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