

Section 6.5: Circular Functions, Graphs, and Properties

Wednesday, February 18, 2015
12:33 PM

Assignment #4 due on

Tuesday, March 10

Quiz #4 on

Thursday, March 12

calculate the following, giving your answer to 2 decimal places:

$$\cos \pi/12 = 0.97$$

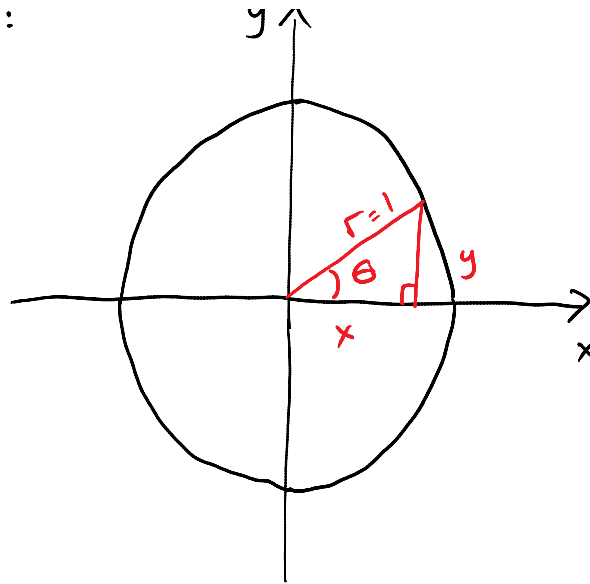
$$\sin 3 = 0.14$$

$$\sec \frac{3\pi}{11} = \frac{1}{\cos(3\pi/11)} = 1.53$$

$$\tan -852 = -0.73$$

unit circle: $y \uparrow$

unit circle:

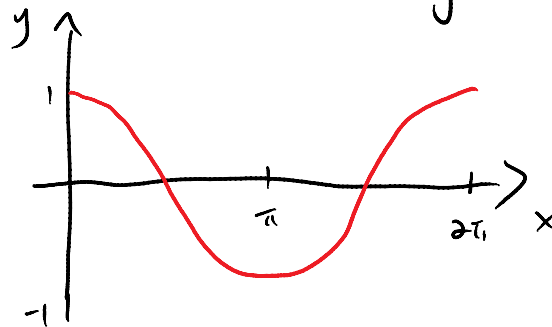


note: at $\theta = 0$, $\sin \theta = 0$
 $\cos \theta = 1$

and then $\sin \theta$ increases to 1 at 90°
 $\cos \theta$ decreases to 0 at 90°

we did handout

consider the graph $y = \cos x$



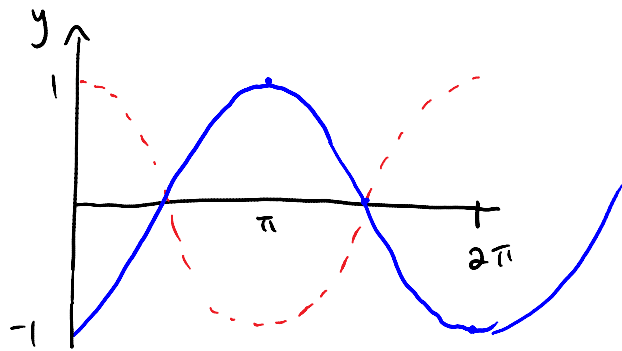
what would you get if you shifted this graph

by 2π to the right?

same graph!

$$\text{so } \cos x = \cos(x - 2\pi)$$

what would you get if you shifted $y = \cos x$
by π to the right?



what would you get if you reflected $y = \cos x$
about the x-axis?
same!

$$\therefore \cos(x - \pi) = -\cos x$$