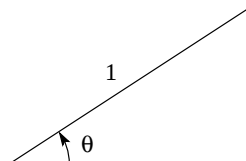


MAT 120: Trigonometry

The first page of Test 3 will look like this. You will need to answer these questions from memory.

Indicate $\sin(\theta)$, $\cos(\theta)$, $\sin\left(\frac{\pi}{4} - \theta\right)$, and $\cos\left(\frac{\pi}{4} - \theta\right)$ on the unit triangle. Also, apply the Pythagorean theorem:



Fill in values:

angle	0	30°	45°	60°	90°
x	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$
$\sin(x)$					
$\cos(x)$					
$\tan(x)$					

Define:

$$\tan(x) =$$

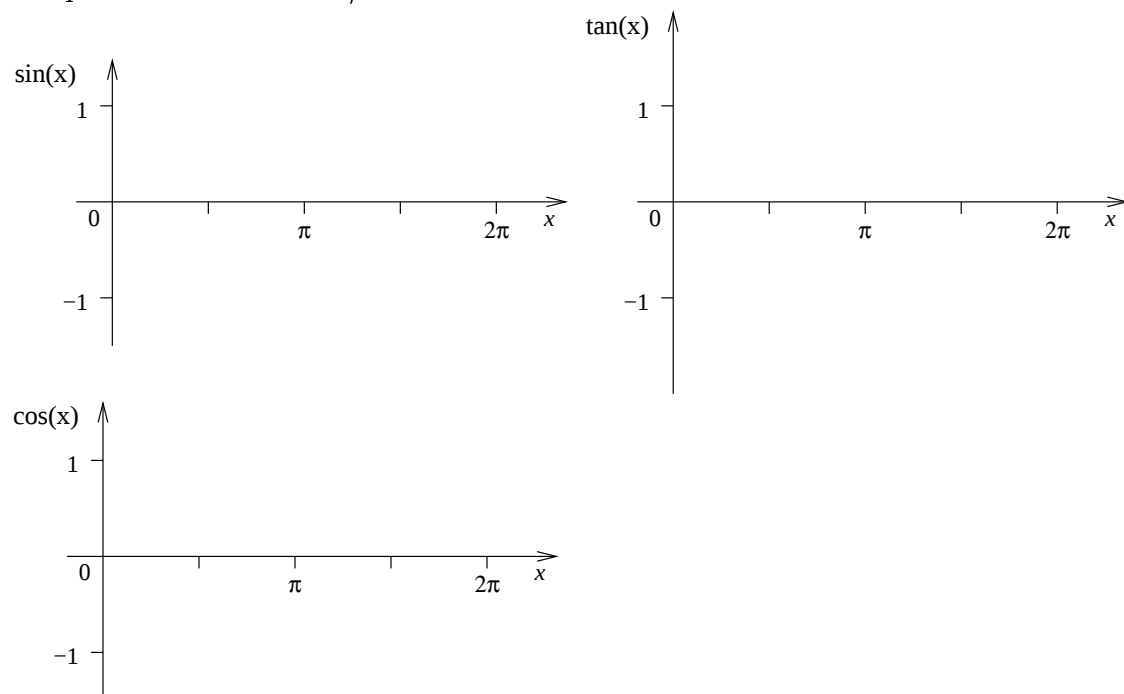
$$\sec(x) =$$

$$\csc(x) =$$

$$\cot(x) =$$

$$e^{i\theta} =$$

Graph and indicate even/odd:



This table of trig identities will be supplied on Test 3.

1. Angle addition formulas

- $\sin(A \pm B) = \sin(A) \cos(B) \pm \cos(A) \sin(B)$
- $\cos(A \pm B) = \cos(A) \cos(B) \mp \sin(A) \sin(B)$
- $\tan(A \pm B) = \frac{\tan(A) \pm \tan(B)}{1 \mp \tan(A) \tan(B)}$