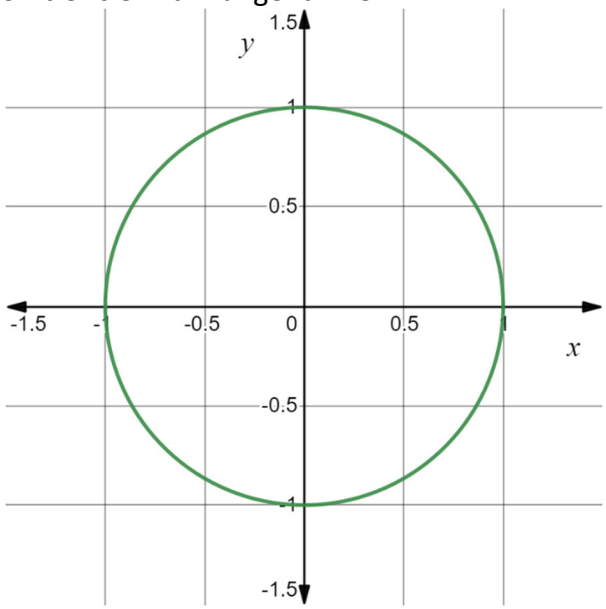
Name: _____ Date: _____

Learning Goal 5.1	Graphing primary trigonometric functions, including transformations and characteristics

Unit Circle Definition of Tangent Function

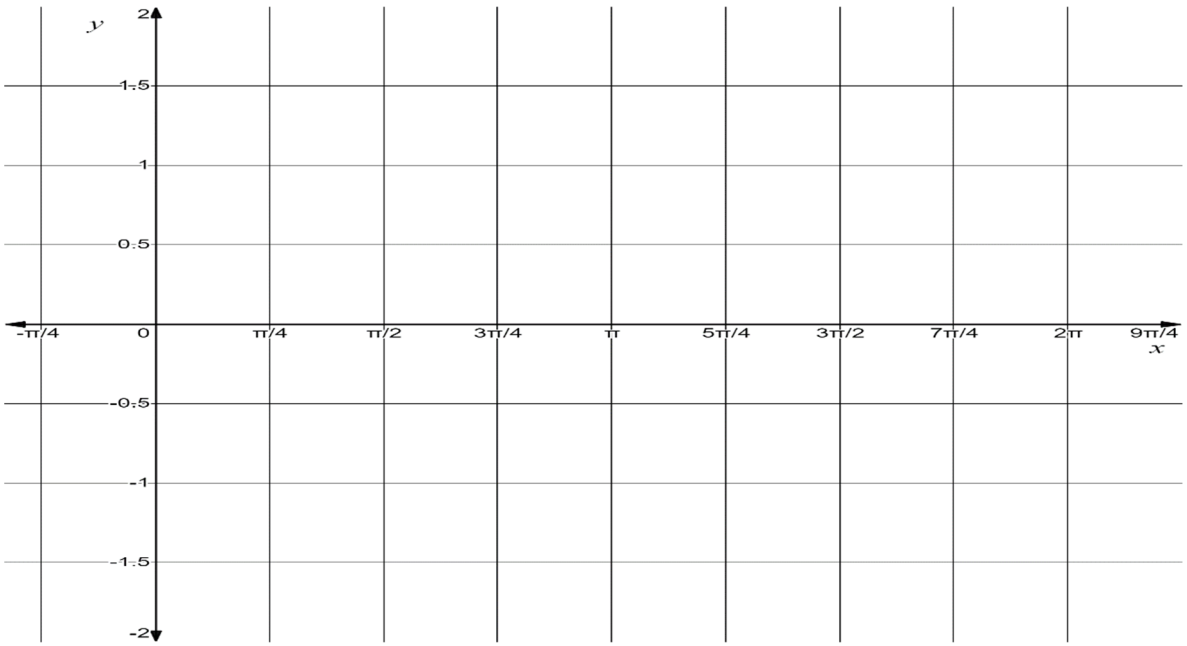
Unit Circle with Tangent Line



Derivation of the identity

$$\tan\theta = \frac{\sin\theta}{\cos\theta}.$$

Sketch of the graph $y = \tan\theta$ http://commons.wikimedia.org/wiki/File:Tan_drawing_process.gif



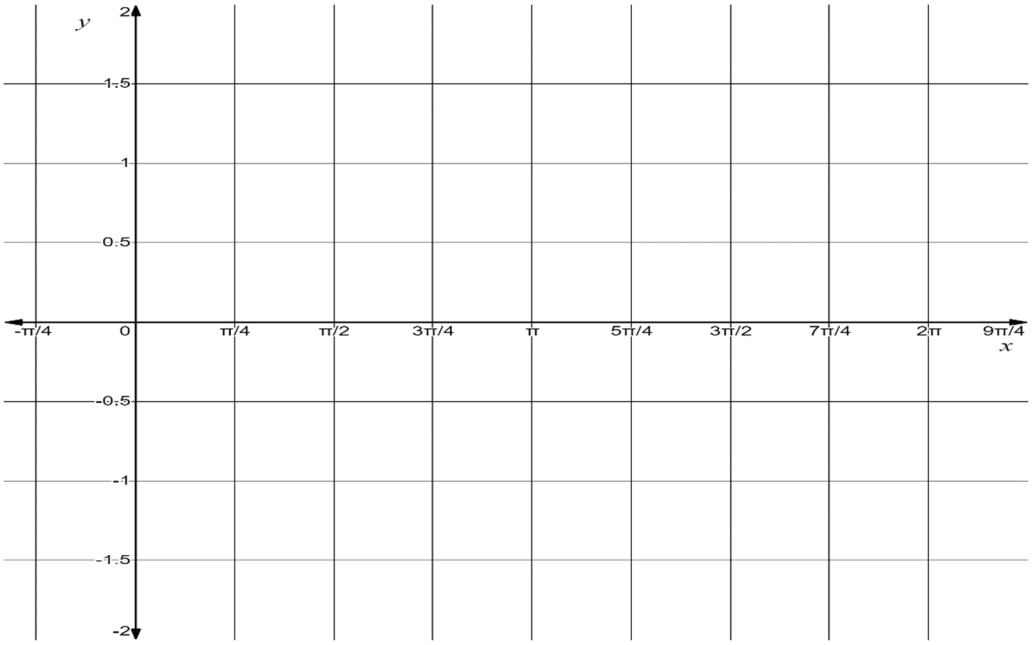
Assignment p. 262 # 1 – 7, 9, 13, C1, C2 Quiz Next Day!

Function	Domain	Range	Period	x −Intercepts	Asymptotes
$\boldsymbol{y = \sin x}$					
$\boldsymbol{y = \cos x}$					
$\boldsymbol{y = \tan x}$					

Example Graph the function $\boldsymbol{y = 3\tan 2x}$ for $0 \le x \le 2\pi$.

a. What is the period of the function?

b. State the domain and range of the function.



Example Graph the function $f(x) = -3\tan {}^{1}/_{2}\,x$. State the domain and range of the function and the equation of any asymptotes.