Class Discussion: Intro to Trig, Part 1

Review degrees/radians:

θ (degrees)	$0°$	$30°$	$45°$	$60°$	$90°$	$180°$	$270°$	$360°$
θ (radians)								

Review Definition of Sine and Cosine: If point P is specified by θ in a unit circle then:
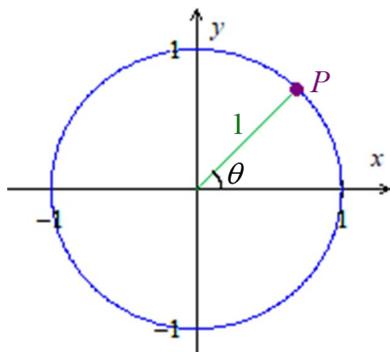
What is the *largest* possible number that $\sin(\theta)$ and $\cos(\theta)$ can equal?

What is the *smallest* possible number that $\sin(\theta)$ and $\cos(\theta)$ can equal?
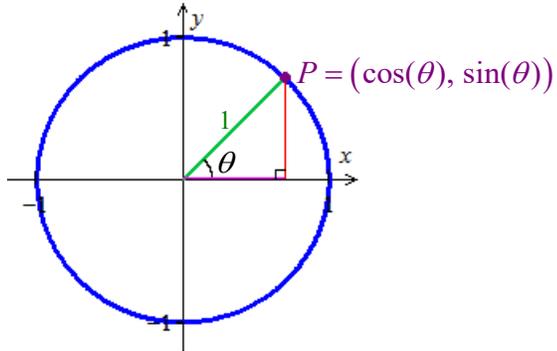
What is the *range* of these functions?

Find the value of the following:

$\sin(90°)$	$\sin(\pi)$	
$\cos(90°)$	$\cos(2\pi)$	

Determine the **sign** of the following:

$\sin(137°)$	$\sin(5)$	
$\cos(137°)$	$\cos(4)$	

The Pythagorean Identity:

$P = (\cos(\theta),\ \sin(\theta))$

Finding trig values for an angle when you know one trig value for the angle:

If $\cos(\theta) = \frac{5}{6}$ and $\frac{3\pi}{2} < \theta < 2\pi$, find $\sin(\theta)$.