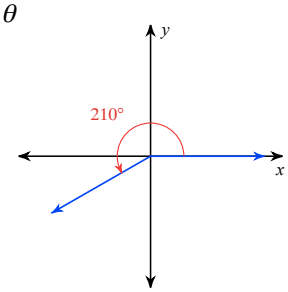
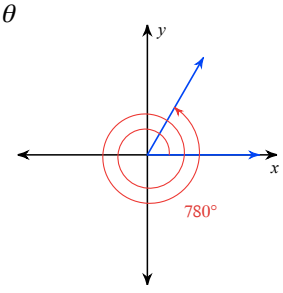
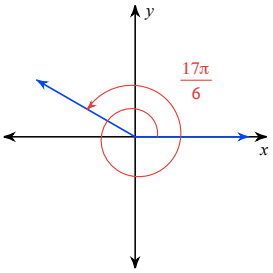
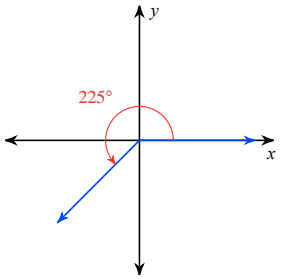
Name:_____ Class:_____ Date:_____

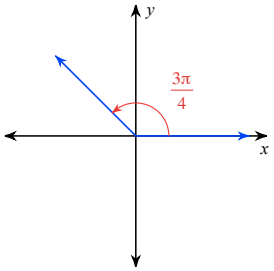
Honors Precalculus Circuit: Trig Fxns, Reference Angles, Angles not on Unit Circle

Start with #1. Find the answer to #1 and label that problem #2. Repeat the process until the last answer takes you to the first box. If you get stuck and cannot work the circuit, you can still work the problems.

Directions for all problems, unless otherwise directed: Find the exact value of each trigonometric function by using the reference if needed. Calculator answers are rounded to four decimal places.

Answer: _____ #1 . sin θ 	Answer: -1 #____. $\cot(-\frac{\pi}{6})$
Answer: 11.4301 #____. Use a calculator to find csc 214°	Answer: 123.0001° and 303.0001° #____. Find the measure of θ, where $0° < \theta < 360°$. csc θ = -1.00382
Answer: $-\sqrt{3}$ #____. $\cos(-\frac{35\pi}{6})$	Answer: $-\frac{1}{2}$ #____. cot θ 

Answer: -2 #____. cot(585°)	Answer: -1.7883 #____. Use a calculator to find sin (−902°)
Answer: undefined #____. csc θ  	Answer: 264.9999° and 275.0001° #____. Find the measure of θ, where $0° < \theta < 360°$. Sec θ = -2.23662
Answer: $\frac{\sqrt{3}}{3}$ #____. sec(−945°)	Answer: 1 #____. cos θ 

Answer: 0.0349 #____. Use a calculator to find $\cos\left(-\frac{\pi}{18}\right)$	Answer: 2 #____. Use a calculator to find cot 905°
Answer: 0.9848 #____. Use a calculator to find $\sec\frac{7\pi}{3}$	Answer: $-\sqrt{2}$ #____ . tan 60°
Answer: $\sqrt{3}$ #____ . sin(390°)	Answer: $-\frac{\sqrt{2}}{2}$ #____ . tan θ 

Answer: -0.3640

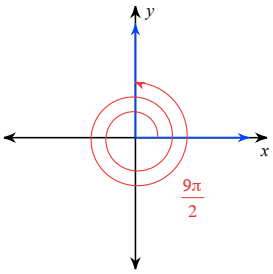
<u>#____</u>. Find the measure of θ, where $0° < \theta < 360°$.

$\cos\theta = 0.01745$

Answer: $\frac{\sqrt{3}}{2}$

<u>#____</u>.

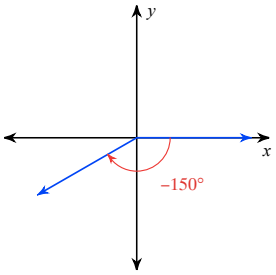
$\sec\theta$



Answer: $\frac{1}{2}$

<u>#____</u> .

$\csc\theta$



Answer: 2.0000

<u>#____</u>. Use a calculator to find $\tan\left(-\frac{\pi}{9}\right)$

Answer: 89.0001° and 270.9999°

<u>#____</u>. Find the measure of θ, where $0° < \theta < 360°$.

$\tan\theta = -1.53986$

This box is empty, void, nondescript, absent of mathematics…