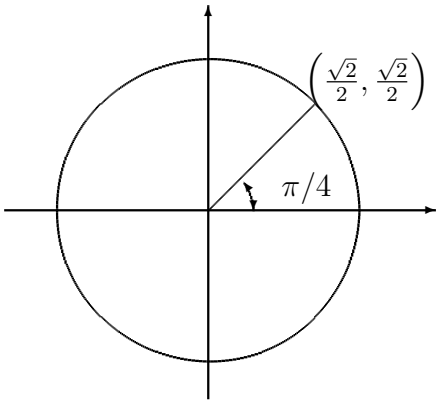
Unit Circle Trig WS 2

Name:

$\sin\theta = \frac{\text{opp}}{\text{hyp}} = y$	$\csc\theta = \frac{\text{hyp}}{\text{opp}} = \frac{1}{y}$
$\cos\theta = \frac{\text{adj}}{\text{hyp}} = x$	$\sec\theta = \frac{\text{hyp}}{\text{adj}} = \frac{1}{x}$
$\tan\theta = \frac{\text{opp}}{\text{adj}} = \frac{y}{x}$	$\cot\theta = \frac{\text{hyp}}{\text{opp}} = \frac{x}{y}$

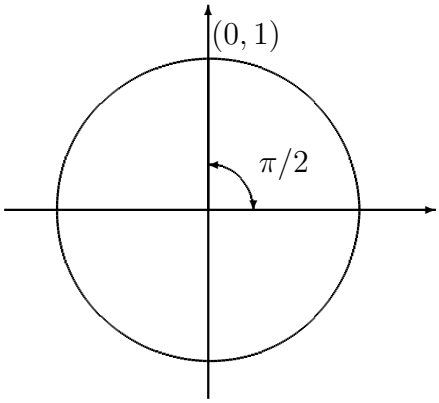
1. Use $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$ to find

$\sin\frac{\pi}{4} =$	$\csc\frac{\pi}{4} =$
$\cos\frac{\pi}{4} =$	$\sec\frac{\pi}{4} =$
$\tan\frac{\pi}{4} =$	$\cot\frac{\pi}{4} =$



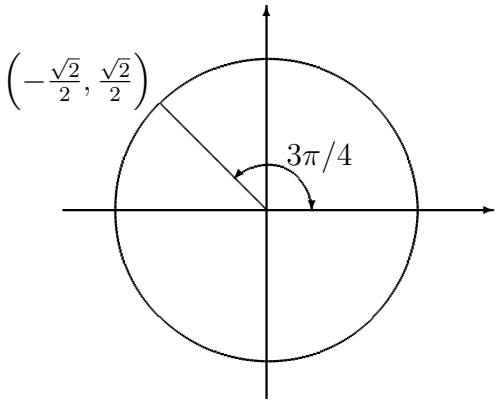
2. Use $(0, 1)$ to find

$\sin\frac{\pi}{2} =$	$\csc\frac{\pi}{2} =$
$\cos\frac{\pi}{2} =$	$\sec\frac{\pi}{2} =$
$\tan\frac{\pi}{2} =$	$\cot\frac{\pi}{2} =$



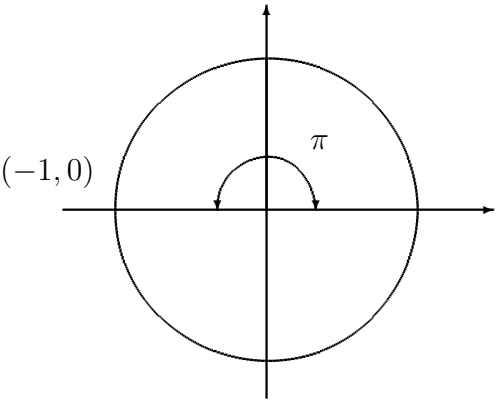
3. Use $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$ to find

$\sin\frac{3\pi}{4} =$	$\csc\frac{3\pi}{4} =$
$\cos\frac{3\pi}{4} =$	$\sec\frac{3\pi}{4} =$
$\tan\frac{3\pi}{4} =$	$\cot\frac{3\pi}{4} =$



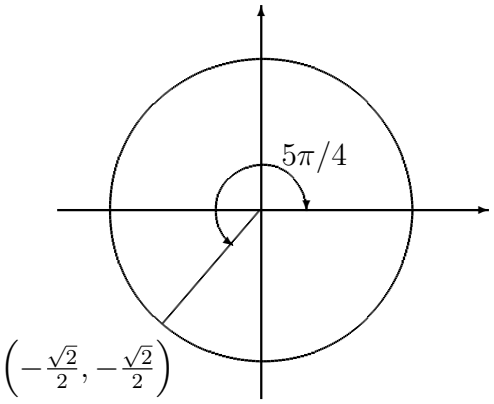
4. Use $(-1, 0)$ to find

$\sin\pi =$	$\csc\pi =$
$\cos\pi =$	$\sec\pi =$
$\tan\pi =$	$\cot\pi =$



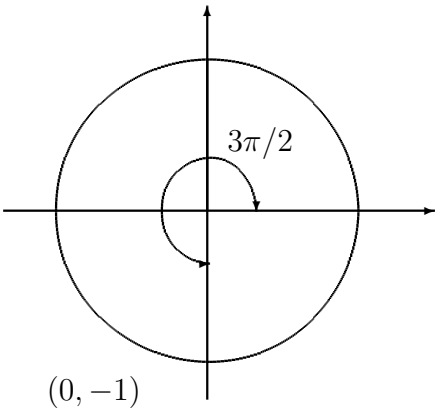
5. Use $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$ to find

$\sin\frac{5\pi}{4} =$	$\csc\frac{5\pi}{4} =$
$\cos\frac{5\pi}{4} =$	$\sec\frac{5\pi}{4} =$
$\tan\frac{5\pi}{4} =$	$\cot\frac{5\pi}{4} =$



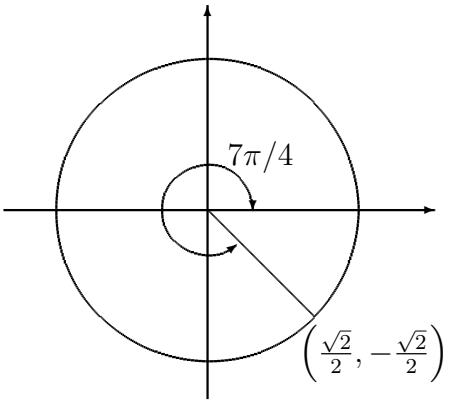
6. Use $(0, -1)$ to find

$\sin\frac{3\pi}{2} =$	$\csc\frac{3\pi}{2} =$
$\cos\frac{3\pi}{2} =$	$\sec\frac{3\pi}{2} =$
$\tan\frac{3\pi}{2} =$	$\cot\frac{3\pi}{2} =$



7. Use $\left(\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$ to find

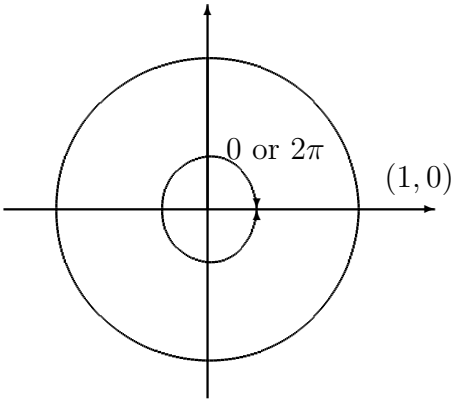
$\sin\frac{7\pi}{4} =$	$\csc\frac{7\pi}{4} =$
$\cos\frac{7\pi}{4} =$	$\sec\frac{7\pi}{4} =$
$\tan\frac{7\pi}{4} =$	$\cot\frac{7\pi}{4} =$



8. Use $(1, 0)$ to find

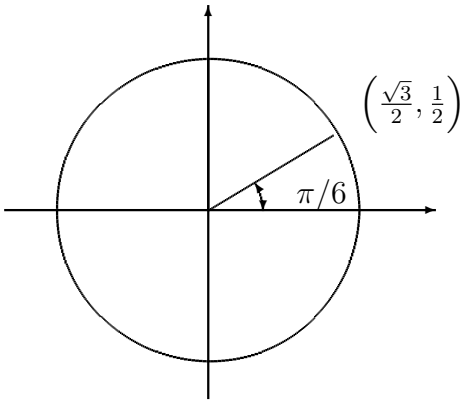
$\sin 0 =$	$\csc 0 =$
$\cos 0 =$	$\sec 0 =$
$\tan 0 =$	$\cot 0 =$

Note that $0 = 2\pi$



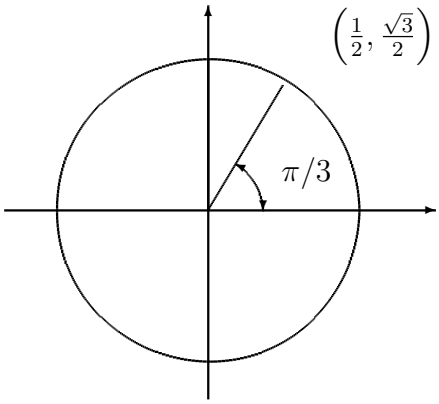
9. Use $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$ to find

$\sin \frac{\pi}{6} =$	$\csc \frac{\pi}{6} =$
$\cos \frac{\pi}{6} =$	$\sec \frac{\pi}{6} =$
$\tan \frac{\pi}{6} =$	$\cot \frac{\pi}{6} =$



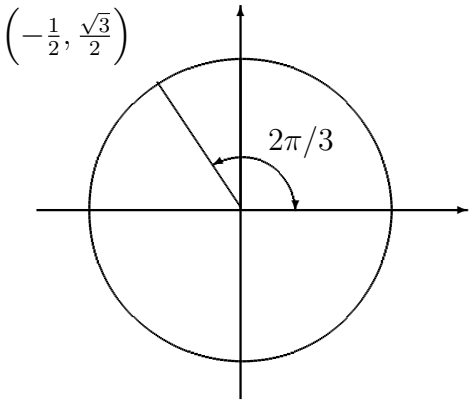
10. Use $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$ to find

$\sin \frac{\pi}{3} =$	$\csc \frac{\pi}{3} =$
$\cos \frac{\pi}{3} =$	$\sec \frac{\pi}{3} =$
$\tan \frac{\pi}{3} =$	$\cot \frac{\pi}{3} =$



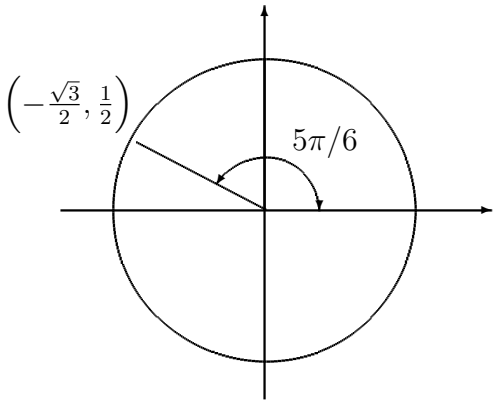
11. Use $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$ to find

$\sin \frac{2\pi}{3} =$	$\csc \frac{2\pi}{3} =$
$\cos \frac{2\pi}{3} =$	$\sec \frac{2\pi}{3} =$
$\tan \frac{2\pi}{3} =$	$\cot \frac{2\pi}{3} =$



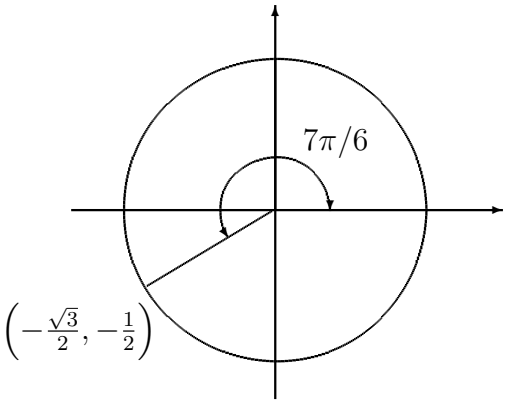
12. Use $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$ to find

$\sin \frac{5\pi}{6} =$	$\csc \frac{5\pi}{6} =$
$\cos \frac{5\pi}{6} =$	$\sec \frac{5\pi}{6} =$
$\tan \frac{5\pi}{6} =$	$\cot \frac{5\pi}{6} =$



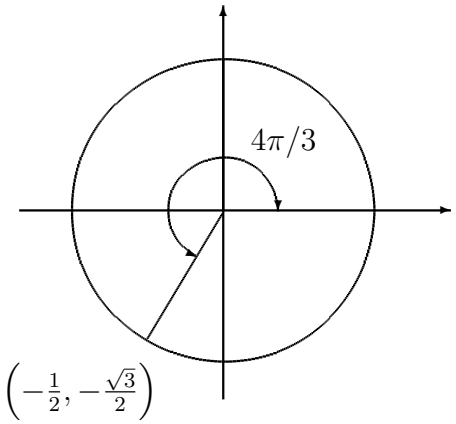
13. Use $\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$ to find

$\sin \frac{7\pi}{6} =$	$\csc \frac{7\pi}{6} =$
$\cos \frac{7\pi}{6} =$	$\sec \frac{7\pi}{6} =$
$\tan \frac{7\pi}{6} =$	$\cot \frac{7\pi}{6} =$



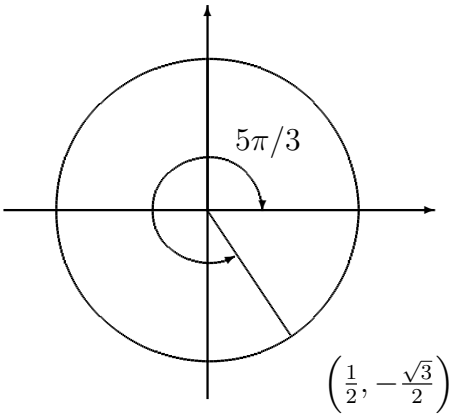
14. Use $\left(-\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$ to find

$\sin \frac{4\pi}{3} =$	$\csc \frac{4\pi}{3} =$
$\cos \frac{4\pi}{3} =$	$\sec \frac{4\pi}{3} =$
$\tan \frac{4\pi}{3} =$	$\cot \frac{4\pi}{3} =$



15. Use $\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$ to find

$\sin \frac{5\pi}{3} =$	$\csc \frac{5\pi}{3} =$
$\cos \frac{5\pi}{3} =$	$\sec \frac{5\pi}{3} =$
$\tan \frac{5\pi}{3} =$	$\cot \frac{5\pi}{3} =$



16. Use $\left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$ to find

$\sin \frac{11\pi}{6} =$	$\csc \frac{11\pi}{6} =$
$\cos \frac{11\pi}{6} =$	$\sec \frac{11\pi}{6} =$
$\tan \frac{11\pi}{6} =$	$\cot \frac{11\pi}{6} =$