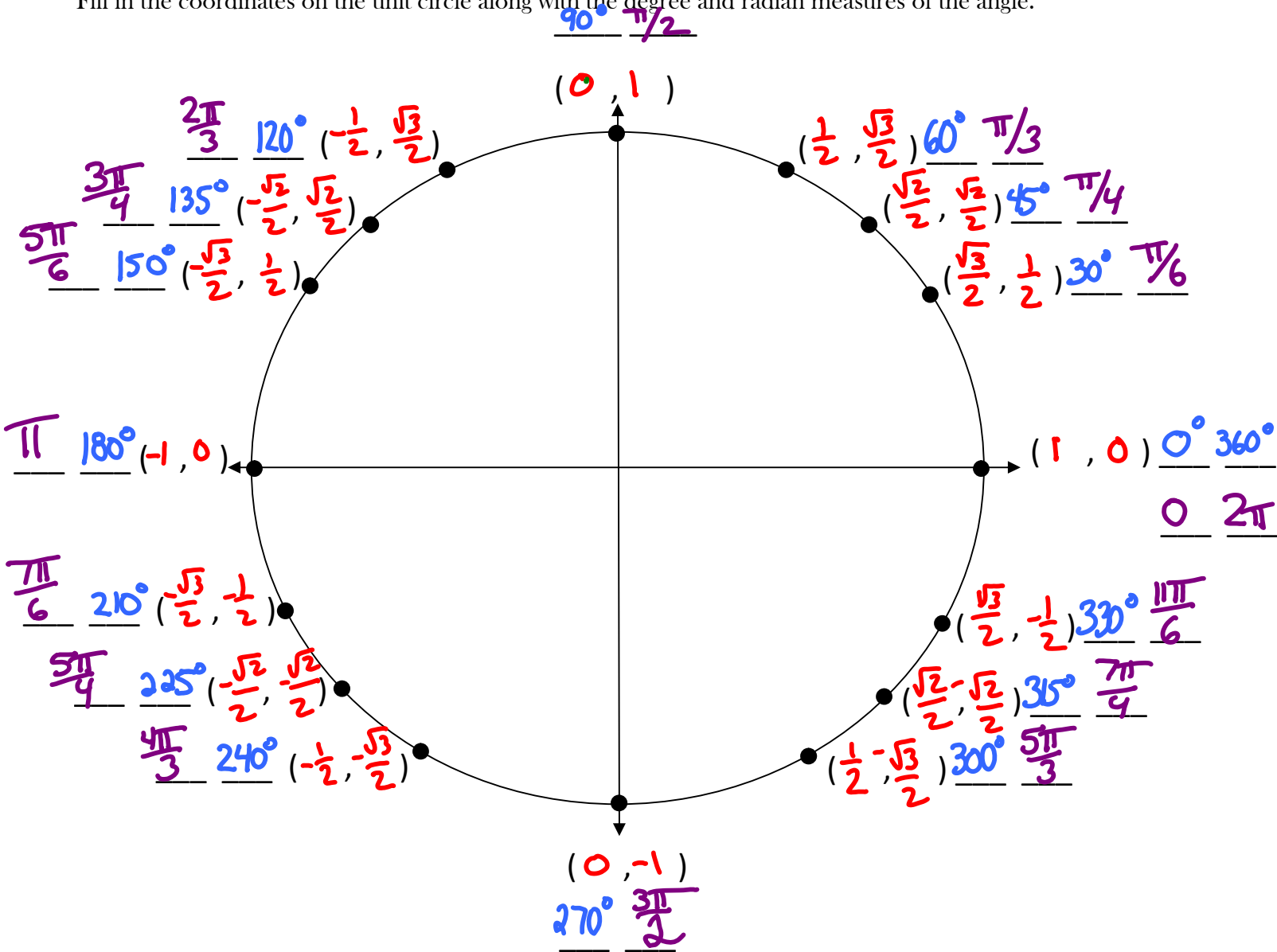


UNIT CIRCLE WORKSHEET

NAME: _____

Fill in the coordinates on the unit circle along with the degree and radian measures of the angle.



Fill in the radian measure equivalent to the degree measure and then fill the values of the trig functions.

		Sin θ	Cos θ	Tan θ	Csc θ	Sec θ	Cot θ
$0^\circ, 360^\circ$	2π	0	1	0	Undefined	1	Undefined
90°	$\frac{\pi}{2}$	1	0	Undefined	1	Undefined	0
180°	π	0	-1	0	Undefined	-1	Undefined
270°	$\frac{3\pi}{2}$	-1	0	Undefined	-1	Undefined	0

Fill in the radian measure equivalent to the degree measure and then fill the values of the trig functions.

		Sin Θ	Cos Θ	Tan Θ	Csc Θ	Sec Θ	Cot Θ
30°	$\pi/6$	$1/2$	$\sqrt{3}/2$	$\sqrt{3}/3$	2	$2\sqrt{3}/3$	$\sqrt{3}$
45°	$\pi/4$	$\sqrt{2}/2$	$\sqrt{2}/2$	1	$\sqrt{2}$	$\sqrt{2}$	1
60°	$\pi/3$	$\sqrt{3}/2$	$1/2$	$\sqrt{3}$	$2\sqrt{3}/3$	2	$\sqrt{3}/3$

WITHOUT A TRIG FUNCTION CALCULATOR. Find the EXACT value of the following.

1) $\cos -270^\circ = 0$

2) $\tan 8\pi = 0$

3) $\csc 630^\circ = -1$

4) $\sec -\frac{7\pi}{2} = \text{undefined}$

5) $\cot -870^\circ = \sqrt{3}$

6) $\sin \frac{13\pi}{4} = \frac{-\sqrt{2}}{2}$

7) $\sec -450^\circ = \text{undefined}$

8) $\cos 13\pi = -1$

9) $\tan -300^\circ = \sqrt{3}$

10) $\cot -\frac{\pi}{4} = -1$

11) $\sin 1170^\circ = 1$

12) $\csc -\frac{19\pi}{6} = 2$

13) $\cos 0^\circ = 1$

14) $\tan \frac{11\pi}{3} = -\sqrt{3}$

15) $\cot -315^\circ = 1$

16) $\tan -\frac{\pi}{2} = \text{undefined}$

17) $\csc -45^\circ = -\sqrt{2}$

18) $\sin \frac{11\pi}{3} = -\frac{\sqrt{3}}{2}$