

Name _____ Date _____

2CP Unit Circle Practice

1. Complete the chart with the exact values of the **3** trig functions for the given angle measurements.

Radian	Degree	$\sin \theta$	$\cos \theta$	$\tan \theta$
	0°			
	30°			
	45°			
	60°			
	90°			
	120°			
	135°			
	150°			
	180°			
	210°			
	225°			
	240°			
	270°			
	300°			
	315°			
	330°			
	360°			

2. Draw the Unit Circle. Label all angles in degrees and radians, and all sine and cosine values.

Try to find the exact value of each expression without looking at the chart or unit circle.

3. $\sin(-510^\circ)$

4. $\sin 495^\circ$

5. $\cos\left(-\frac{5\pi}{2}\right)$

6. $\sin\left(\frac{5\pi}{3}\right)$

7. $\cos 45^\circ$

8. $\sin 210^\circ$

9. $\sin 330^\circ$

10. $\cos 330^\circ$

11. $\cos(-60^\circ)$

12. $\sin(-390^\circ)$

13. $\sin 5\pi$

14. $\cos 3\pi$

15. $\sin \frac{5\pi}{2}$

16. $\sin \frac{7\pi}{3}$

17. $\cos\left(-\frac{7\pi}{3}\right)$

Answers:

10. $\frac{\sqrt{3}}{2}$

3. $-\frac{1}{2}$

11. $\frac{1}{2}$

4. $\frac{\sqrt{2}}{2}$

12. $-\frac{1}{2}$

5. 0

13. 0

6. $-\frac{\sqrt{3}}{2}$

14. -1

7. $\frac{\sqrt{2}}{2}$

15. 1

8. $-\frac{1}{2}$

16. $\frac{\sqrt{3}}{2}$

9. $-\frac{1}{2}$

17. $\frac{1}{2}$