UNIT 9 The Unit Circle

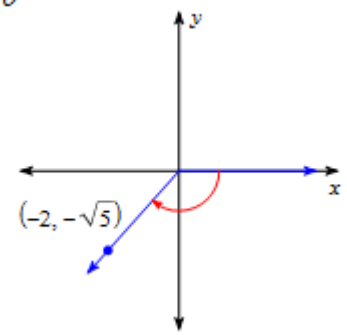
REVIEW

NAME:_____

DATE:_____

Draw a reference triangle and find the EXACT RATIO of the trig function indicated.

1. $\sec\theta$



2. $\sin\theta$ for $(-4, 6)$

3. Given $\csc\theta = \frac{25}{7}$ where $\frac{\pi}{2} < \theta < \pi$. Find $\tan\theta$.

WITHOUT USING THE UNIT CIRCLE OR TABLE!

Find the exact value.

4. $\sin 60°$

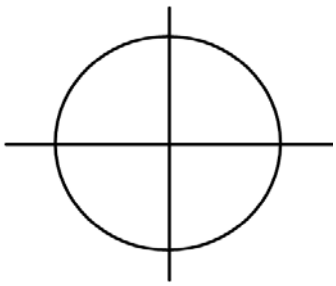
5. $\cos\left(-\frac{5\pi}{4}\right)$

If $0° \le \theta \le 360°$, then find θ

6. $\sin\theta = \frac{\sqrt{2}}{2}$

7. $\cos\theta = -\frac{1}{2}$

8. Find all six trig functions. Fill in the table. **WITHOUT USING THE UNIT CIRCLE OR TABLE!**



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

USE THE UNIT CIRCLE AND TABLE!

Use the table to find the EXACT value.

9. $\sec 300°$

10. $\sin\frac{5\pi}{4}$

Use the table to find the angle where $0° \le \theta \le 360°$.

11. $\cos\theta = -\frac{\sqrt{2}}{2}$

12. $\csc\theta = -2$

Round to the nearest hundredth!

Find the APPROXIMATE value.

13. $\csc 70°$

14. $\cot(-115°)$

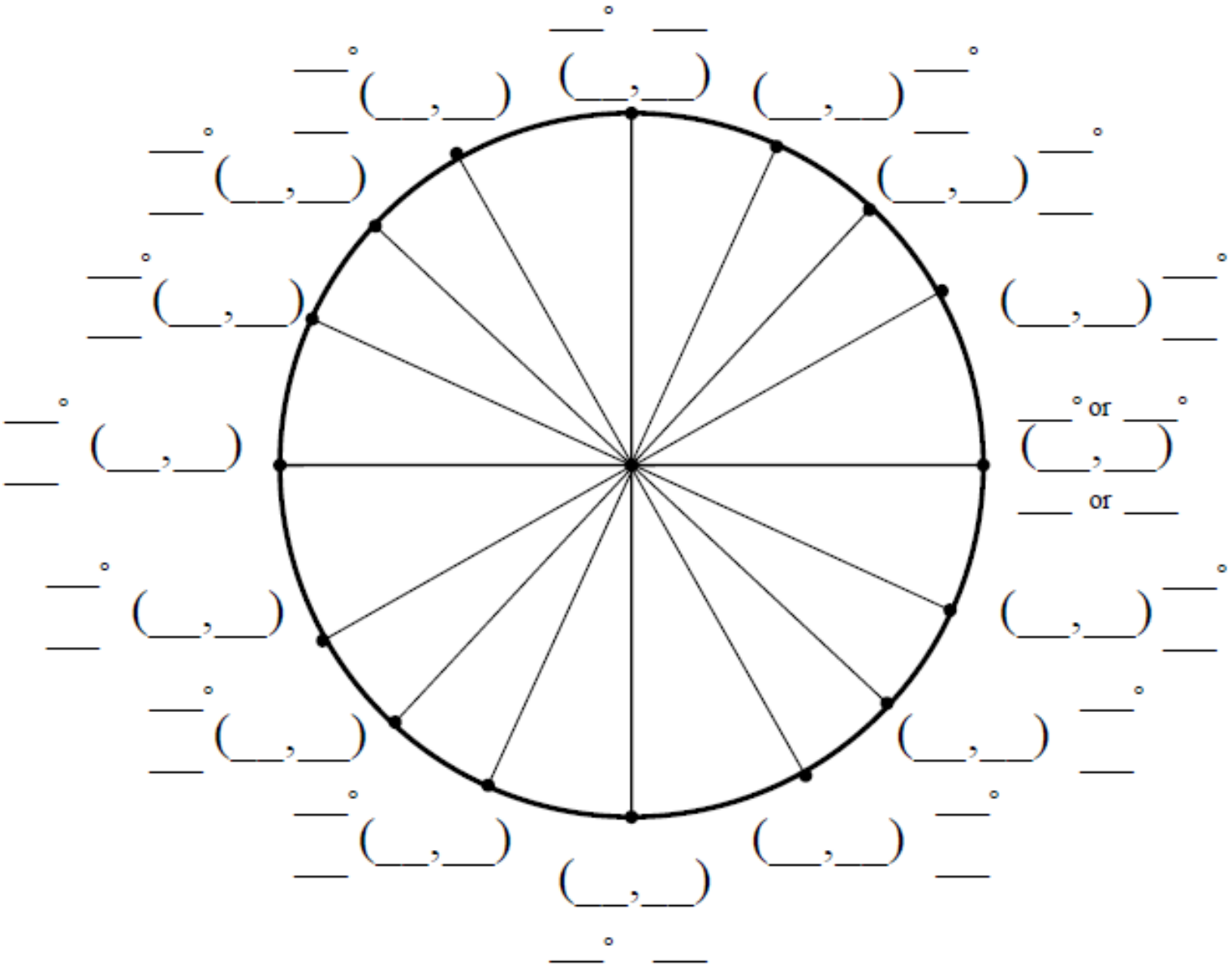
APPROXIMATE each angle where $0° \le \theta \le 360°$.

15. $\cos\theta = -0.848048$

16. $\csc\theta = 1.72$

APPLICATION

Fill in every angle measure in degrees, radians, and give the coordinates of the point on the unit circle.



Fill in the missing parts of the table.

degrees	radians	sin θ	cos θ	tan θ	csc θ	sec θ	cot θ	- degree	- radian
	$\frac{\pi}{3}$								
		$\frac{\sqrt{3}}{2}$	$-\frac{1}{2}$						
								$-120°$	
			-1						