

## 9.2 Reference and Special Angles

NAME: \_\_\_\_\_

## Corrective Assignment

DATE: \_\_\_\_\_

**Find the reference angle.**

1. $321^\circ$	2. $288^\circ$	3. $-137^\circ$	4. $125^\circ$
5. $-214^\circ$	6. $-308^\circ$	7. $248^\circ$	8. $172^\circ$

**Find the exact value.**

9. $\sin 30^\circ$	10. $\cos 60^\circ$	11. $\tan 135^\circ$	12. $\sin 150^\circ$
13. $\cos 225^\circ$	14. $\tan 150^\circ$	15. $\sin(-330)^\circ$	16. $\cos(-135)^\circ$
17. $\tan(-315)^\circ$	18. $\csc(-270)^\circ$	19. $\sec 180^\circ$	20. $\cot 90^\circ$

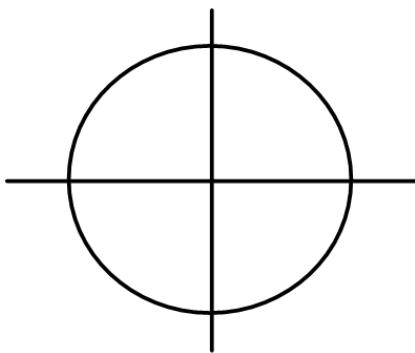
**Find the exact value.**

21. $\sin \frac{\pi}{4}$	22. $\cos \frac{\pi}{6}$	23. $\tan \frac{2\pi}{3}$	24. $\sin \frac{3\pi}{4}$
25. $\cos \pi$	26. $\tan \frac{7\pi}{4}$	27. $\sin(-\frac{5\pi}{3})$	28. $\cos(-\frac{11\pi}{6})$
29. $\tan(-\frac{3\pi}{4})$	30. $\csc \frac{\pi}{2}$	31. $\sec 2\pi$	32. $\cot \frac{3\pi}{4}$

**If  $0^\circ \leq \theta \leq 360^\circ$ , then find  $\theta$** 

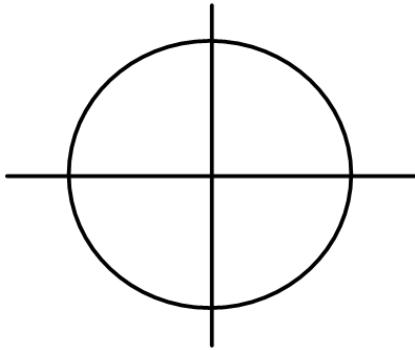
33. $\sin \theta = \frac{\sqrt{2}}{2}$	34. $\cos \theta = \frac{1}{2}$	35. $\tan \theta = \sqrt{3}$	36. $\sin \theta = \frac{\sqrt{3}}{2}$
37. $\sin \theta = 0$	38. $\cos \theta = -\frac{\sqrt{2}}{2}$	39. $\tan \theta = -1$	40. $\sin \theta = -\frac{1}{2}$
41. $\cos \theta = \frac{\sqrt{3}}{2}$	42. $\cot \theta = 1$	43. $\csc \theta = -1$	44. $\sec \theta = \text{undefined}$

45. Find all six trig functions. Fill in the table.



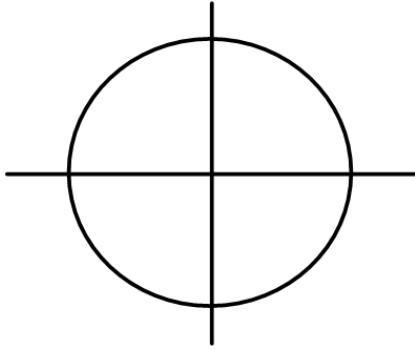
radians	$\sin \theta$	$\cos \theta$	$\tan \theta$	$\csc \theta$	$\sec \theta$	$\cot \theta$
$\frac{5\pi}{3}$						

46. Find all six trig functions. Fill in the table.



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

47. Find all six trig functions. Fill in the table.



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

## ANSWERS TO CORRECTIVE ASSIGNMENT 9.2

1. $39^\circ$	2. $72^\circ$	3. $43^\circ$	4. $55^\circ$	5. $34^\circ$	6. $52^\circ$	7. $68^\circ$	8. $8^\circ$				
9. $\frac{1}{2}$	10. $\frac{1}{2}$	11. $-1$	12. $\frac{1}{2}$	13. $-\frac{\sqrt{2}}{2}$	14. $\frac{\sqrt{3}}{3}$	15. $\frac{1}{2}$	16. $-\frac{\sqrt{2}}{2}$				
17. 1	18. 1	19. $-1$	20. 0	21. $\frac{\sqrt{2}}{2}$	22. $\frac{\sqrt{3}}{2}$	23. $-\sqrt{3}$	24. $\frac{\sqrt{2}}{2}$				
25. $-1$	26. $-1$	27. $-\frac{\sqrt{3}}{2}$	28. $\frac{\sqrt{3}}{2}$	29. 1	30. 1	31. 1	32. $-1$				
33. $45^\circ, 135^\circ$	34. $60^\circ, 300^\circ$			35. $60^\circ, 240^\circ$			36. $60^\circ, 120^\circ$				
37. $0^\circ/360^\circ, 180^\circ$	38. $135^\circ, 225^\circ$			39. $135^\circ, 315^\circ$			40. $210^\circ, 330^\circ$				
41. $30^\circ, 330^\circ$	42. $45^\circ, 225^\circ$			43. $270^\circ$			44. $90^\circ, 270^\circ$				
45.	46.	47.									
<b>sin</b>	<b>cos</b>	<b>tan</b>	<b>csc</b>	<b>sec</b>	<b>cot</b>	<b>sin</b>	<b>cos</b>	<b>tan</b>	<b>csc</b>	<b>sec</b>	<b>cot</b>
$-\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$-\sqrt{3}$	$-\frac{2\sqrt{3}}{3}$	2	$-\frac{\sqrt{3}}{3}$	$-\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	-1	$-\sqrt{2}$	$\sqrt{2}$	-1