Quadrantal Angles
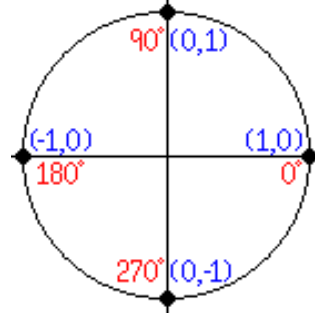## Jefferson Davis Learning Center
Sandra Peterson

Directions: Use the unit circle to determine the six trigonometric values of each of the quadrantal angles.

Remember:
- (x-coordinate, y-coordinate)
- Sine of a quadrantal angle is the y-coordinate
- Cosine of a quadrantal angle is the x-coordinate
- $\tan \theta = \sin \theta / \cos \theta$
- $\cot \theta = \cos \theta / \sin \theta$
- $\sec \theta = 1/\cos \theta$
- $\csc \theta = 1/\sin \theta$

1. $\sin 0° = \underline{\ 0\ }$

2. $\cos 0° = \underline{\ 1\ }$

3. $\tan 0° = \underline{\quad}$

4. $\cot 0° = \underline{\quad}$

5. $\sec 0° = \underline{\quad}$

6. $\csc 0° = \underline{\quad}$

7. $\sin 90° = \underline{\quad}$

8. $\cos 90° = \underline{\quad}$

9. $\tan 90° = \underline{\quad}$

10. $\cot 90° = \underline{\quad}$

11. $\sec 90° = \underline{\quad}$

12. $\csc 90° = \underline{\quad}$

13. $\sin 180° = \underline{\quad}$

14. $\cos 180° = \underline{\quad}$

15. $\tan 180° = \underline{\quad}$

16. $\cot 180° = \underline{\quad}$

17. $\sec 180° = \underline{\quad}$

18. $\csc 180° = \underline{\quad}$

19. $\sin 270° = \underline{\quad}$

20. $\cos 270° = \underline{\quad}$

21. $\tan 270° = \underline{\quad}$

22. $\cot 270° = \underline{\quad}$

23. $\sec 270° = \underline{\quad}$

24. $\csc 270° = \underline{\quad}$

25. $\sin 360° = \underline{\quad}$

26. $\cos 360° = \underline{\quad}$

27. $\tan 360° = \underline{\quad}$

28. $\cot 360° = \underline{\quad}$

29. $\sec 360° = \underline{\quad}$

30. $\csc 360° = \underline{\quad}$

31. $\sin 450° = \underline{\quad}$

32. $\cos 1170° = \underline{\quad}$

33. $\tan 900° = \underline{\quad}$

34. $\cot 630° = \underline{\quad}$

35. $\sec(-270°) = \underline{\quad}$

36. $\csc(-540°) = \underline{\quad}$

Answers:

1. 0	2. 1	3. 0	4. und	5. 1	6. und
7. 1	8. 0	9. und	10. 0	11. und	12. 1
13. 0	14. −1	15. 0	16. und	17. −1	18. und
19. −1	20. 0	21. und	22. 0	23. und	24. −1
25. 0	26. 1	27. 0	28. und	29. 1	30. und
31. 1	32. 0	33. 0	34. 0	35. und	36. und

Please visit the Math Center for further assistance.