



Name the quadrant in which the angle  $\theta$  lies.

17.  $\tan \theta > 0$  and  $\sin \theta < 0$

18.  $\sin \theta > 0$  and  $\cos \theta < 0$

19.  $\cos \theta > 0$  and  $\csc \theta < 0$

20.  $\sec \theta < 0$  and  $\tan \theta < 0$

Use the given information to find  $\cos \theta$  &  $\tan \theta$

21.  $\sin \theta = -3/8$ ,  $\cos \theta < 0$

Find the exact value of the expression.

22.  $\sec^2 65^\circ - \tan^2 65^\circ$       23.  $\sin^2 25^\circ + \cos^2 25^\circ$       24.  $\sin 55^\circ \csc 55^\circ$

Use the even-odd properties to find the exact value of the expression.

25.  $\cos(-60^\circ)$       26.  $\csc(-\pi/3)$       27.  $\tan(-\pi/4)$

### Answer Key

1. $8\pi/3$	2. $-4\pi/5$	3. 5.41
4. $205.71^\circ$	5. $430^\circ$	6. $229.18^\circ$
7. $\sin t = -\sqrt{11}/6$ , $\cos t = 5/6$ , $\tan t = -\sqrt{11}/5$ , $\csc t = -6/\sqrt{11}$ , $\sec t = 6/5$ , $\cot t = -5/\sqrt{11}$	8. $\sin t = -3/\sqrt{13}$ , $\cos t = 2/\sqrt{13}$ , $\tan t = -3/2$ , $\csc t = -\sqrt{13}/3$ , $\sec t = \sqrt{13}/2$ , $\cot t = -2/3$	9. $\frac{1}{2} + \sqrt{3}$
10. 0	11. $\frac{2\sqrt{3}}{3} - \frac{\sqrt{2}}{2}$	12. $-1/2$
13. $-\sqrt{2}$	14. .94	15. .26
16. 2.08	17. III	18. II
19. IV	20. II	21. $\cos \theta = -\frac{\sqrt{55}}{8}$ , $\tan \theta = \frac{3}{\sqrt{55}}$
22. 1	23. 1	24. 1
25. $1/2$	26. $-2\sqrt{3}/3$	27. -1