

The given point lies on the terminal side of an angle θ in standard position. Find the values of the six trigonometric functions of θ .

1. (3, 4)
2. (-6, 6)
3. (-4, -3)
4. (2, 0)
5. (1, -8)
6. (5, -3)
7. (-8, 15)
8. (-1, -2)

Find the exact value of each expression.

25. $\cos \frac{4\pi}{3}$
26. $\tan \frac{7\pi}{6}$
27. $\sin \frac{3\pi}{4}$
28. $\cot (-45^\circ)$
29. $\csc 390^\circ$
30. $\sec (-150^\circ)$
31. $\tan \frac{11\pi}{6}$
32. $\sin 300^\circ$

Find the exact values of the five remaining trigonometric functions of θ .

33. $\tan \theta = 2$, where $\sin \theta > 0$ and $\cos \theta > 0$
34. $\csc \theta = 2$, where $\sin \theta > 0$ and $\cos \theta < 0$
35. $\sin \theta = -\frac{1}{5}$, where $\cos \theta > 0$
36. $\cos \theta = -\frac{12}{13}$, where $\sin \theta < 0$
37. $\sec \theta = \sqrt{3}$, where $\sin \theta < 0$ and $\cos \theta > 0$
38. $\cot \theta = 1$, where $\sin \theta < 0$ and $\cos \theta < 0$
39. $\tan \theta = -1$, where $\sin \theta < 0$
40. $\cos \theta = -\frac{1}{2}$, where $\sin \theta > 0$