

44. $\sec \theta = 5$. Then $\cos \theta = \frac{1}{5}$ and $y = -\sqrt{5^2 - 1^2} = -2\sqrt{6}$. So $\sin \theta = -\frac{2\sqrt{6}}{5}$, $\cos \theta = \frac{1}{5}$, $\tan \theta = -2\sqrt{6}$, $\csc \theta = -\frac{5}{2\sqrt{6}}$, $\cot \theta = -\frac{1}{2\sqrt{6}}$.

46. $\cot \theta = \frac{1}{4}$. Then $\tan \theta = 4$ and $r = \sqrt{4^2 + 1^2} = \sqrt{17}$. So $\sin \theta = -\frac{4}{\sqrt{17}}$, $\cos \theta = -\frac{1}{\sqrt{17}}$, $\tan \theta = 4$, $\csc \theta = -\frac{\sqrt{17}}{4}$, $\sec \theta = -\sqrt{17}$.

48. $\tan \theta = -4$. Then $r = \sqrt{4^2 + 1^2} = \sqrt{17}$, and so $\sin \theta = \frac{4}{\sqrt{17}}$, $\cos \theta = -\frac{1}{\sqrt{17}}$, $\csc \theta = \frac{\sqrt{17}}{4}$, $\sec \theta = -\sqrt{17}$, $\cot \theta = -\frac{1}{4}$.