

You may have correctly determined that the reference angle is 30° and then confused secant with cosecant. To find the correct value of $\sec 330^\circ$ you must find the value of $\sec 30^\circ$ and then determine the correct sign. To determine the correct sign, use the signs of x and y in the fourth quadrant, remembering that: $\sec \theta = \frac{1}{x}$