

You may have mistakenly used a $30^\circ - 60^\circ - 90^\circ$ triangle and found $\sec 30^\circ$.

Refer to the $45^\circ - 45^\circ - 90^\circ$ triangle. From there you can see that $\tan 45^\circ = 1$. It follows that $x = 45^\circ$. The correct answer is $\sqrt{2}$.