

Correct. The acute angles are complementary, so $m\angle Z = 45^\circ$. This is a $45^\circ - 45^\circ - 90^\circ$ triangle. In this type of triangle, the length of the hypotenuse is $\sqrt{2}$ times the length of the leg. So:

$$x = \sqrt{2} \cdot \frac{\sqrt{2}}{2} = \frac{\sqrt{2} \cdot \sqrt{2}}{2} = \frac{2}{2} = 1$$