Incorrect. The acute angles are complementary, so $m\angle S = 30^\circ$. This is a $30^\circ - 60^\circ - 90^\circ$ triangle. One way to find the length of the hypotenuse is to use the sine function, because you know the value of $\sin 60^\circ$:

$$\frac{5\sqrt{3}}{t} = \sin 60^\circ = \frac{\sqrt{3}}{2}$$

Solve this equation for *t*. To find the length of $\overline{RT}$, you could solve this equation:

$$\frac{5\sqrt{3}}{s} = \tan 60^\circ = \sqrt{3}$$