1. The first thing Mr. Lopez did was draw a right triangle, triangle *RST*, with legs the same length as those of triangle *ABC* (see above). Why can Mr. Lopez say that $r^2 + s^2 = t^2$?

R and S are legs of a right tria
and t is the hypotenuse so $r^2 + s^2 = t^2$ =

2. Since $r^2 + s^2 = t^2$, he next claimed that $a^2 + b^2 = t^2$? Why can a and b be substituted for r and s?

They are both legs.

3. He next stated that $t^2 = c^2$. Explain why this must be true.

This must be true because the same 2 values =

4. He finally stated that $t = c$ and explained that if the three sides of one triangle are congruent to the three sides of another triangle, then the triangles must be congruent. What can now be said of the measure of angle *C*? What does this mean about triangle *ABC*?

It is congruent to RST because they are right A

with equal sides SSS