

Finding Congruent Triangles

1.

Solomon says: I have drawn a triangle.
It has one angle of 30° and another angle of 40° .
Adeline, you draw a triangle with the same two properties.

Adeline says: My triangle will be congruent to yours, because *all* triangles that have those two properties must be congruent.

Is Adeline correct to say that all triangles with these two properties must be congruent?

Explain your answer.

2.

Ernie says: I have drawn a triangle.
It has one right angle and one side is 1 inch long.
Suzie, you draw a triangle with the same two properties.

Suzie says: My triangle will be congruent to yours, because *all* triangles that have those two properties must be congruent.

Is Suzie correct to say all triangles with these two properties must be congruent?

Explain your answer.

3.

Burt says: I have drawn a triangle.
One side is 2" long, and it has angles of 50° and 30° .
Wally, you draw a triangle with the same two properties.

Wally says: My triangle will be congruent to yours, because *all* triangles that have those three properties must be congruent.

Is Wally correct to say that all triangles with these three properties must be congruent?

Explain your answer.