Explore Triangle Congruence Worksheets (ASA)

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Did the condition of Angle-Side-Angle ASA determine a unique triangle?

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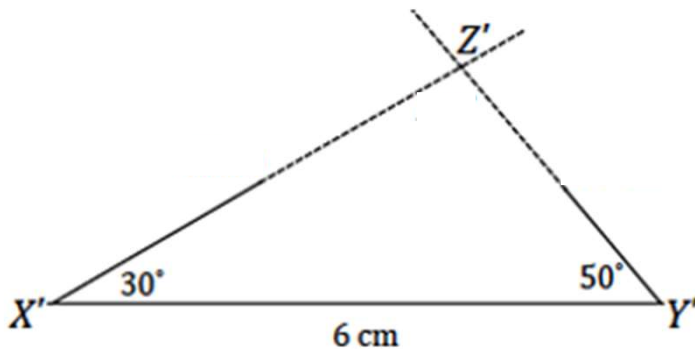
All of the triangles are identical; the condition determined a unique triangle. After drawing the included side length, I used the protractor to draw the provided angle measurements at either endpoint of the included side $\overline{X'Y'}$. Since these two angle measurements are fixed, the two remaining side lengths will intersect in one location, which is the third vertex of the triangle, Z'. There is no other way to draw this triangle; therefore, the condition determines a unique triangle.