Explore Triangle Congruence Worksheets (SAS)

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Did the condition of Side-Angle-Side (SAS) determine a unique triangle?

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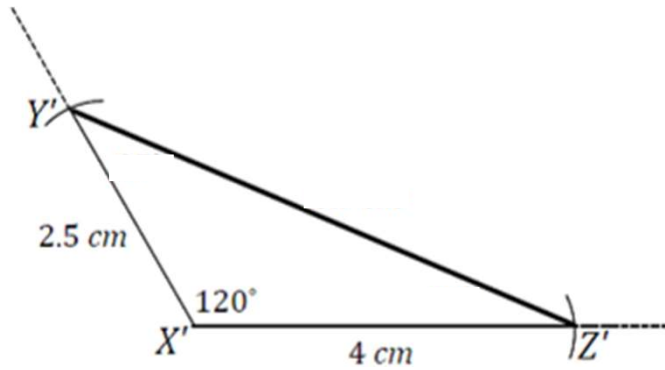
The condition on $\triangle X'Y'Z'$ is two side lengths and the included angle measurement. The triangle is identical to other triangles drawn under this condition; the conditions produced a unique triangle. Once the $120°$ angle is drawn and the 2.5 cm and 7 cm side lengths are marked off on the rays of the angle, there is only one place the third side of the triangle can be. Therefore, all triangles drawn under these conditions will be identical. Switching the 2.5 cm and 7 cm sides also gives a triangle satisfying the conditions, but it is just a flipped version of the other.