Explore Triangle Congruence Worksheets (SAS)

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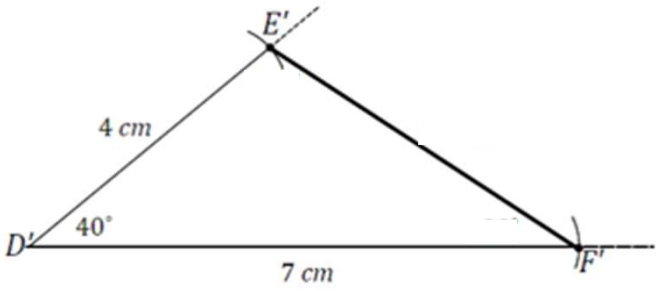

The condition on $\triangle D'E'F'$ is two side lengths and the included angle measurement. All of the triangles are identical; the condition determined a unique triangle. Once the $40°$ angle is drawn and the $4\ cm$ and $7\ cm$ side lengths are marked off on the rays of the angle, there is only one place the third side of the triangle can be. Therefore, all triangles drawn under this condition will be identical. Switching the $4\ cm$ and $7\ cm$ sides also gives a triangle satisfying the conditions, but it is just a flipped version of the other.