

Predictions about Constructing Triangles

1) Use a ruler and a protractor. Draw a triangle with sides 3 cm and 6 cm and a 120° angle that is not between the given sides. Predict whether all of your classmates will draw the same triangle. Check your prediction.

2) Dan and Stan were each asked to draw a triangle with a 30° angle, a 60° angle and a 5 cm side between the two angles. Is it possible for them to draw two different triangles that meet these conditions?

3) Can you draw a triangle with a 30° angle, a 45° angle and a 3 cm side that is NOT between the two given angles? Can you draw more than one triangle? Try it and see.

4) Is it possible to draw a triangle with a 30° angle, a 110° angle, and a 5 cm side that is between the two angles? Predict if it is possible to draw more than one triangle.