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**27o**

AA Criterion for Similarity: Two triangles are similar if they have all of the same angle measures.

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**Yes they are similar. Both triangles have angles of 31o, 46o and 103o.**

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**No they are not similar. The angles in the first triangle are 31o, 46o and 103o. There is an 85o angle in the second triangle.**

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**Yes they are similar. Both triangles have angles of 48o, 60o and 72o.**

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**Yes they are similar. Both triangles have angles of 32o, 64o and 84o.**

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**No they are not similar. The angles in the second triangle are 37o, 44o and 99o and the first triangle has a 43o angle.**

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**Yes they are similar. Both triangles have angles of 31o, 46o and 103o.**

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**Yes they are similar. Both triangles have angles of 29o, 70o and 81o.**

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**No they are not similar. The angles in the first triangle are 31o, 46o and 103o and the angles in the second triangle are 27o, 31o and 122o.**



**Yes they are similar. Both triangles have the same angle measure on the bottom right angle and a 90o angle so the third angle must have the same measure too.**



**Yes they are similar. Both triangles have angles of 40o, 60o and 80o.**



**No they are not similar. The smaller triangle has angle measures of 35o, 70o and 75o and there is an 80o angle in the larger triangle.**



**Yes they are similar. Both triangles have a 55o angle and the vertical angles would have the same measure so the third angles would have the same measure too.**

In $∆$ ABC, m < A = 55o and m < B = 60o and in $∆$ DEF, m < D = 55o and m < E = 65o.

**Yes they are similar. m < C = 65o and m < F = 60o so all of the angles have the same measure.**

In $∆$ PQR, m < P = 35o and m < Q = 65o and in $∆$ STV, m < S = 60o and m < T = 35o.

**No they are not similar. m < R = 80o and m < V = 85o so the angles are not all the same.**

In $∆$ ABC, m < A = 90o and m < B = 20o and in $∆$ DEF, m < D = 90o and m < E = 70o.

**Yes they are similar. m < C = 70o and m < F = 20o so all of the angles have the same measure.**