

Digits Lesson 11-5

4/15/2019

Goal: I will be able to determine similar triangles from angles.

Tool Bag
Formulas, equations,
Vocabulary, etc.

Here's How... Notes & Examples

Draw $\triangle ABC$
Dilate by a scale factor of 2 from the origin

$x_1 = x_3$ $x_2 = x_4$
A are similar

Similar Triangles

If 2 angles of one triangle are congruent to 2 angles of another triangle, then the triangles are similar.

$\angle C = 180 - (77 + 58)$
 $= 180 - 135$
 $= 45$

Yes, similar

$\triangle ABC \sim \triangle DEF$

Example

Is $\triangle ABC \sim \triangle DEC$?

Because the symbols are the same "}"
 $\angle A = \angle D$

$\angle C = \angle C$ Vertical Angles
Yes, similar because 2 angles are the same.

Example 2

a) Is $\triangle LMP \sim \triangle QMN$?
 $\angle L = \angle Q$ $\angle M = \angle M$ (Vertical \angle 's)
Yes similar

b) Is $\triangle RPQ \sim \triangle RNL$? Yes, similar
 $\angle R = \angle R$ $\angle Q = \angle L = 43$

c) Is $\triangle LMP \sim \triangle RPQ$? Not sure, not enough info

d) Is $\triangle QMN \sim \triangle RNL$? Not sure, not enough info.