

NAME: _____

CLASS: _____

Geometry Lab 3

What Matches With What? (Tools: Graph paper, ruler, protractor)

Plot these three points to form \triangle CAT. C(2,5) A (12,11), T(8,16)

Plot these three points to form \triangle DOG. D (-4,-10), O(-8,-5), G(2,1)

Using the distance formula, calculate the lengths of the following leaving your answer in radical form:

CA= _____ AT=_____ CT=_____

DO= _____ OG= _____ DG= _____

1. Which sides in \triangle DOG correspond with which sides in \triangle CAT?

Side _____ corresponds with side _____

Side _____ corresponds with side _____

Side _____ corresponds with side _____

Using a protractor, measure each vertex. (The vertex is the angle formed by any two sides of a triangle, so you are measuring the degrees in each angle).

$\angle C =$ $\angle A =$ $\angle T =$ $\angle D =$ $\angle O =$ $\angle G =$

2. Which angles in \triangle DOG match with which angles in \triangle CAT?

angle _____ matches (corresponds) with angle _____

angle _____ matches (corresponds) with angle _____

angle _____ matches (corresponds) with angle _____

Conclusion: When two polygons are exactly the same shape and size they are called _____.

So, we can say that “corresponding parts of _____ triangles are _____” (CPCTC).

Name all the corresponding sides and angles in these two triangles.

