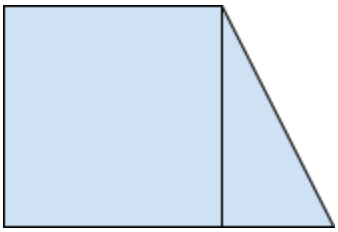
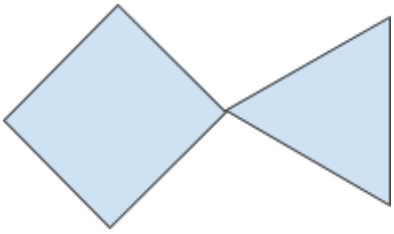
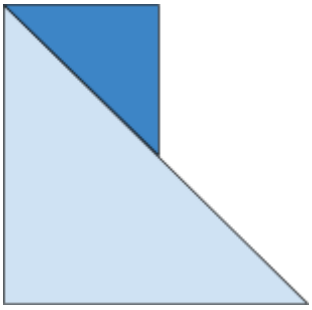
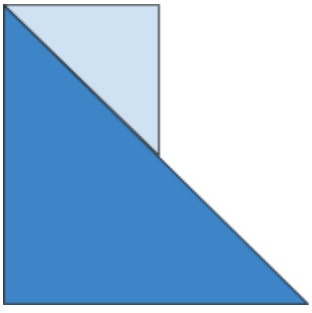
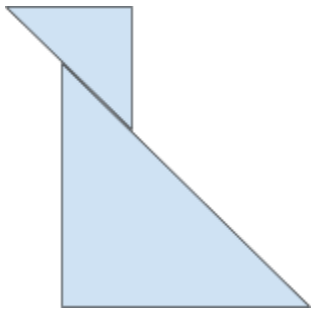
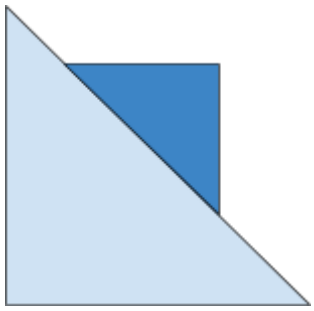
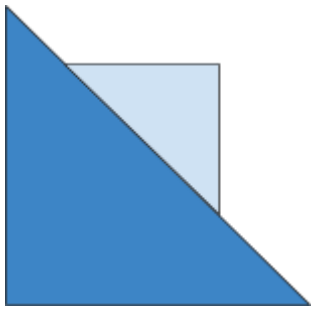
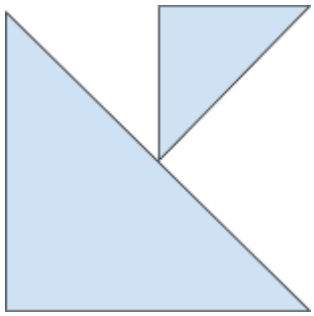
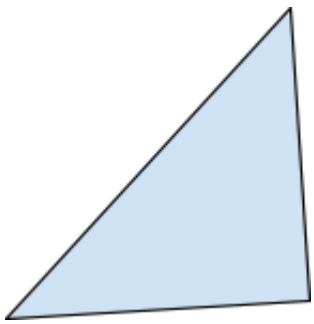
Representations

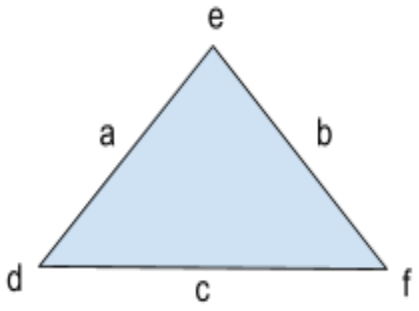
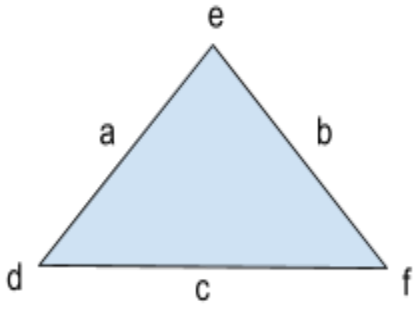
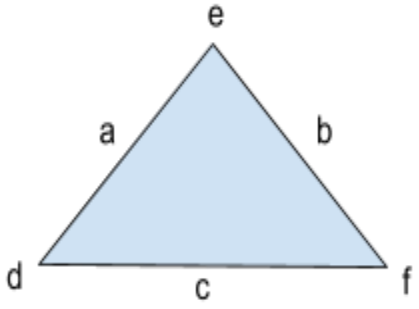
Darker polygons are the point of reference and are defined first in the relation.

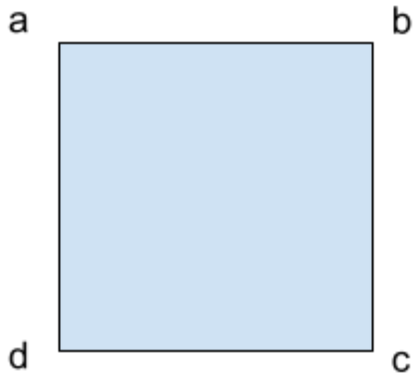
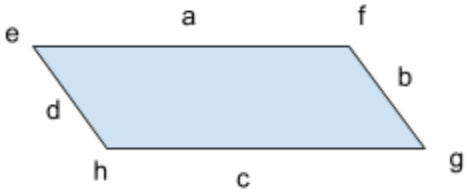
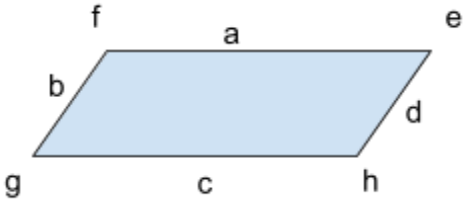
Symbol	Name	Image
teq	Tangential Equal	
vc	Vertex Connection	
tovi	Tangential One Vertex Included	
tovii	Tangential One Vertex Included Inverse	

to	Tangential Overlapping	
tei	Tangential Edge Included	
teii	Tangential Edge Included Inverse	
vec	Vertex-Edge Connection	
dc	Disconnected	

Old Representation of Polygons

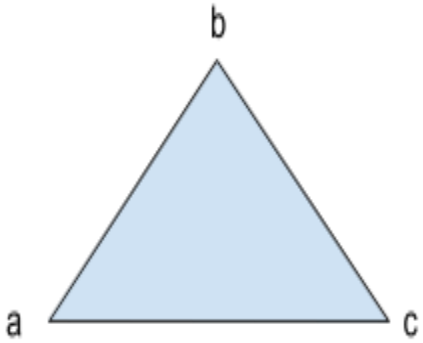
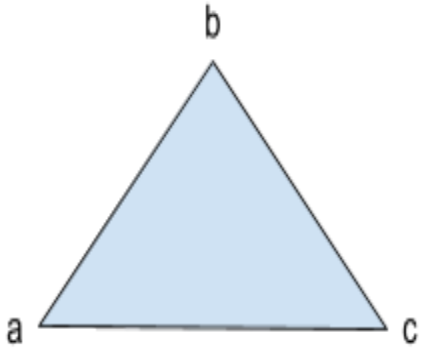
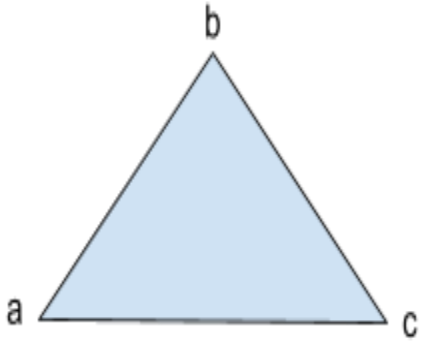
Each edge and vertex are given a name, represented by a letter. The full name of any edge or vertex then uses XYZ, where X is the name of the shape, Y is either ‘e’ for edge or ‘v’ for vertex, and Z is the name of that edge/vertex. See the table below for the naming of each edge/vertex for each shape.
In the Tangram Dataset, this representation is used for the first two parts of any relation. For example the statement (geb tovi oec gvb ova) has tovi as the predicate describing the relation between geb (green edge b) and oec (orange edge c). The last 2 parts of the statement switch to the naming convention below.

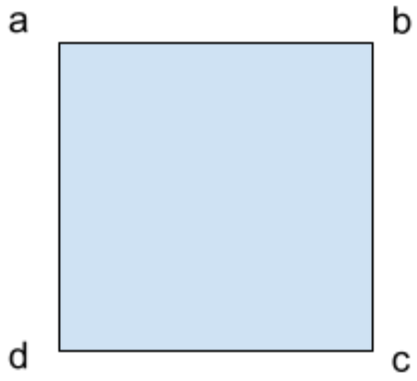
Shape	Rep	Picture
Large Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. oea means orange-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. gvd means green-vertex-d	
Medium Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. rea means red-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. rvd means red-vertex-d	
Small Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. bea means blue-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. pvd means pink-vertex-d	

Square	To represent Edge: se_ _ -> s (square), e (edge), letter for one vertex of edge, letter for other vertex of edge E.g. seab means the edge that is between vertex a and b To represent Vertex: sv_ -> s (square), v (vertex), letter of edge E.g. svc means square-vertex-c	
Parallelogram Side 1	To represent Edge: pe_1 -> p (parallelogram), e (edge), letter of edge, 1 indicates that it is on side 1 E.g. pec1 means parallelogram-edge-c-side 1 To represent Vertex: pv_1 -> p (parallelogram), v (vertex), letter of vertex, 1 indicates that it is on side 1 E.g. pvg1 means parallelogram-vertex-g-side 1	
Parallelogram Side 2	To represent Edge: pe_2 -> p (parallelogram), e (edge), letter of edge, 2 indicates that it is on side 2 E.g. pec2 means parallelogram-edge-c-side 2 To represent Vertex: pv_1 -> p (parallelogram), v (vertex), letter of vertex, 2 indicates that it is on side 2 E.g. pvg2 means parallelogram-vertex-g-side 2	

Updated Representation of Polygons

The main difference is that only vertices are labeled, since every edge can be described using the two involved vertices.

Shape	Rep	Picture
Large Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. oea means orange-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. gvd means green-vertex-d	
Medium Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. rea means red-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. rvd means red-vertex-d	
Small Triangle	To represent Edge: _e_ -> color first initial, e (edge), letter for edge E.g. bea means blue-edge-a To represent Vertices: _v_ -> color first initial, v (vertex), letter for vertex E.g. pvd means pink-vertex-d	

Square	To represent Edge: se_ _ -> s (square), e (edge), letter for one vertex of edge, letter for other vertex of edge E.g. seab means the edge that is between vertex a and b To represent Vertex: sv_ -> s (square), v (vertex), letter of edge E.g. svc means square-vertex-c	
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Parallelogram Side 2	To represent Edge: pe_2 -> p (parallelogram), e (edge), letter of edge, 2 indicates that it is on side 2 E.g. pec2 means parallelogram-edge-c-side 2 To represent Vertex: pv_1 -> p (parallelogram), v (vertex), letter of vertex, 2 indicates that it is on side 2 E.g. pvg2 means parallelogram-vertex-g-side 2