

Grades 7-8 (S), 9-12 (S)

Duration: 20 min

Tools: one Logifaces Set / class

Individual work

Keywords: Logical thinking, All cases, Nets

509 - Complement the Net



LOGIFACES
METHODOLOGY
Erasmus+

TEACHER

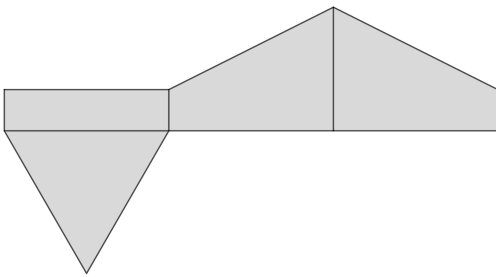
Logifaces

2019-1-HU01-KA201-0612722019-1

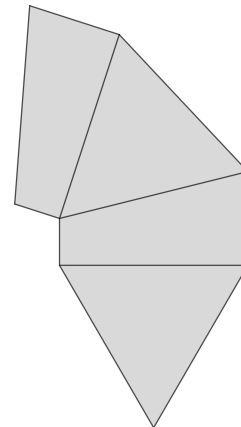
DESCRIPTION

The following figures show nets of Logifaces blocks, with one of the faces removed.

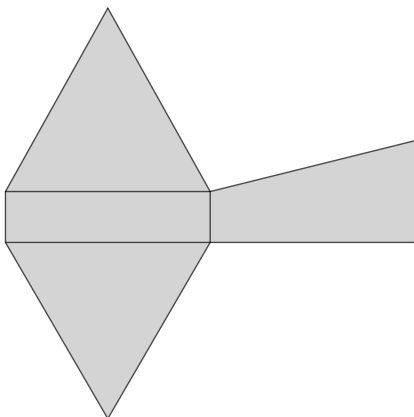
a)



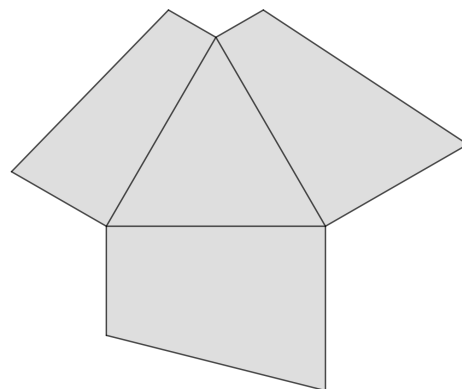
b)



c)



d)



LEVEL 1 Students identify the Logifaces blocks based on their incomplete nets.

LEVEL 2 Students identify the missing polygon, and complete the net.

LEVEL 3 Students find all the possible ways the missing polygon can be placed to complete the net.

Two nets are different if they cannot be transformed into each other by reflection or rotation. (This can be told to students as "you can not distinguish the nets after cutting them out of the paper").

SOLUTIONS / EXAMPLES

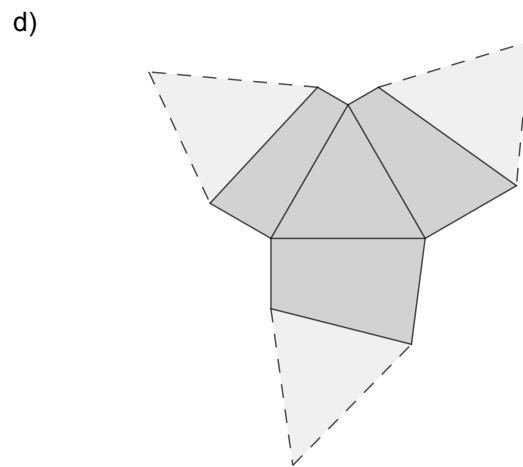
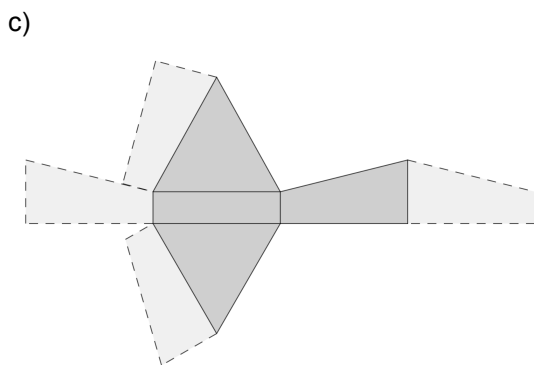
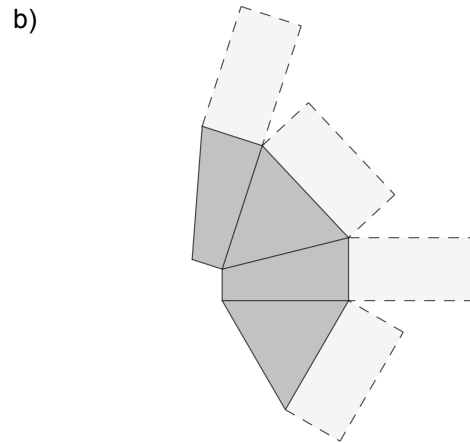
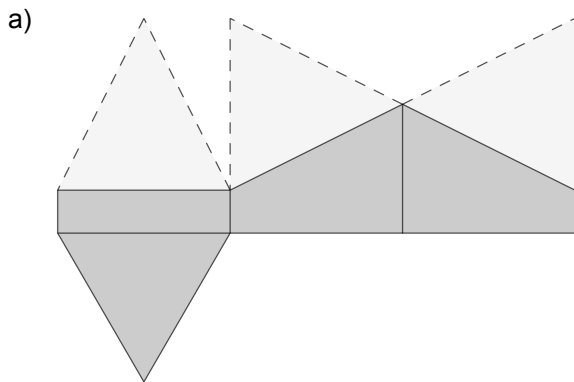
LEVEL 1

- a) 113
- b) 122
- c) 112
- d) 123 or 132

LEVEL 2

The solutions are in the figures below.

Observe that the triangular faces can be drawn in 3 different places and the quadrilateral faces can be drawn in 4 different places.



PRIOR KNOWLEDGE

Logifaces blocks, Net of a polyhedron

RECOMMENDATIONS/COMMENTS