Grades 2-4 (AS) 5 (AS)

Duration: 15-20 min

Tools: one Logifaces Set / student,
Triangular grid

Individual work

Keywords: Addition, Substraction,
Multiplication, Division

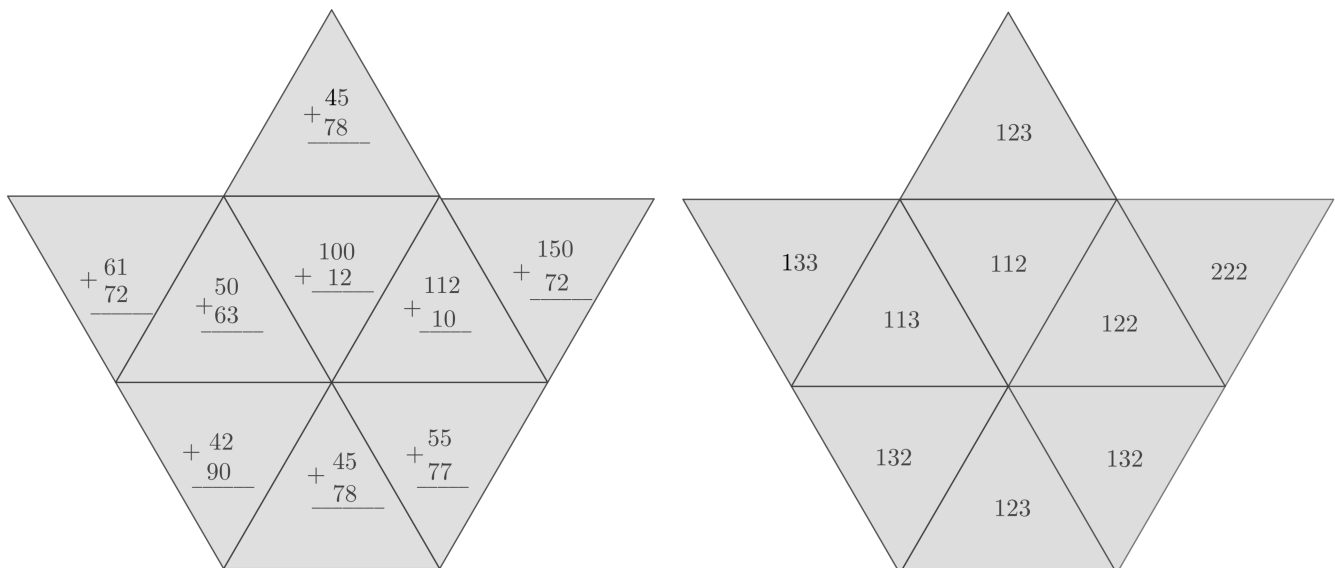# 303 - Floor Plan Puzzle

(1 □ 3)

MATHS / NUMBERS

DESCRIPTION

Each student gets a floor plan with different calculations on it. The goal here is to calculate the given examples and build a Logifaces construction with a smooth surface.

The result of the calculations shows which element needs to be placed in any given triangle, using the standard coding of the blocks. For example when the result of the calculation is 123, block 123 belongs to the triangle. The orientation of the blocks is not given, they should be placed so that the result is a smooth surface.

SOLUTIONS / EXAMPLES

See the figures for an example.

A triangular grid can be found at the end of the exercise to create more constructions and below there are a few suitable calculations for each block. The order of the numbers in the standard coding of the blocks can also be changed for example from 132 to 321, to create more possibilities for the calculations.

111	+	$11 + 100$	$54.2 + 56.8$
	−	$150 - 39$	$166.3 - 55.3$
	×	3×37	30×3.7
	÷	$333 \div 3$	$355.2 \div 3.2$
222	+	$150 + 72$	$21.7 + 200.3$
	−	$320 - 98$	$250.4 - 28.4$
	×	6×37	60×3.7
	÷	$888 \div 4$	$821.4 \div 3.7$
333	+	$300 + 33$	$302.2 + 30.8$
	−	$350 - 17$	$333.3 - 0.3$
	×	3×111	92.5×3.6
	÷	$999 \div 3$	$765.9 \div 2.3$
112	+	$100 + 12$	$98.4 + 13.6$
	−	$144 - 32$	$156.8 - 44.8$
	×	28×4	2.8×40
	÷	$560 \div 5$	$705.6 \div 6.3$
122	+	$112 + 10$	$66.6 + 55.4$
	−	$170 - 48$	$177.5 - 55.5$
	×	61×2	4×30.5
	÷	$244 \div 2$	$292.8 \div 2.4$
223	+	$180 + 43$	$199.1 + 23.9$
	−	$250 - 27$	$260.1 - 37.1$
	×	1×223	111.5×2
	÷	$669 \div 3$	$914.3 \div 4.1$
233	+	$12 + 221$	$30.5 + 202.5$
	−	$256 - 23$	$299.4 - 66.4$
	×	1×233	2.5×93.2
	÷	$699 \div 3$	$768.9 \div 3.3$

113	+	50 + 63	72.9 + 40.1
	−	175 − 62	168.2 − 55.2
	×	1 × 113	56.5 × 2
	÷	452 ÷ 4	508.5 ÷ 4.5
133	+	61 + 72	11.3 + 121.7
	−	500 − 367	425.7 − 292.7
	×	7 × 19	38 × 3.5
	÷	931 ÷ 7	851.2 ÷ 6.4
123	+	45 + 78	49.2 + 73.8
	−	245 − 122	162.5 − 39.5
	×	3 × 41	5 × 24.6
	÷	492 ÷ 4	664.2 ÷ 5.4
132	+	42 + 90	100.2 + 31.8
	−	287 − 155	220.8 − 88.8
	×	22 × 6	30 × 4.4
	÷	660 ÷ 5	897.6 ÷ 6.8

PRIOR KNOWLEDGE

Basic arithmetics

RECOMMENDATIONS / COMMENTS

This exercise is recommended for practice of simple calculations and is suitable for differentiation since the level of difficulty of the calculations can be adjusted to the students' level of knowledge.