

Applied logic

Group 3

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Task 1:

ONE + NINE + TWENTY + FIFTY = EIGHTY

Solution:

$$941 + 4241 + 101418 + 22218 = 128818$$

Task 2:

This is the puzzle solved in the implementation.

	1	2	3	4	5	6	7	8	9
A	x	x	x	✓	x	x	x	x	x
B	x	✓	x	x	x	x	x	x	x
C	x	x	x	x	x	✓	x	x	x
D	x	x	x	x	✓	x	x	x	x
E	✓	x	x	x	x	x	x	x	x
F	x	x	x	x	x	x	x	✓	x
G	x	x	✓	x	x	x	x	x	x
H	x	x	x	x	x	x	x	x	✓
I	x	x	x	x	x	x	✓	x	x

3G = H

F = 2A

B = 2E

A > B

3A = 2C

I > C

↶

↷

Task 3:

The first matrix is solved in task3a.smt2. The second matrix is solved in task3b.smt2.

For the second task the <A1First>.<A1Second> is the top-left value of the inverse matrix.

<A2First>.<A2Second> is the top right etc. However, we think that this solution can be improved.