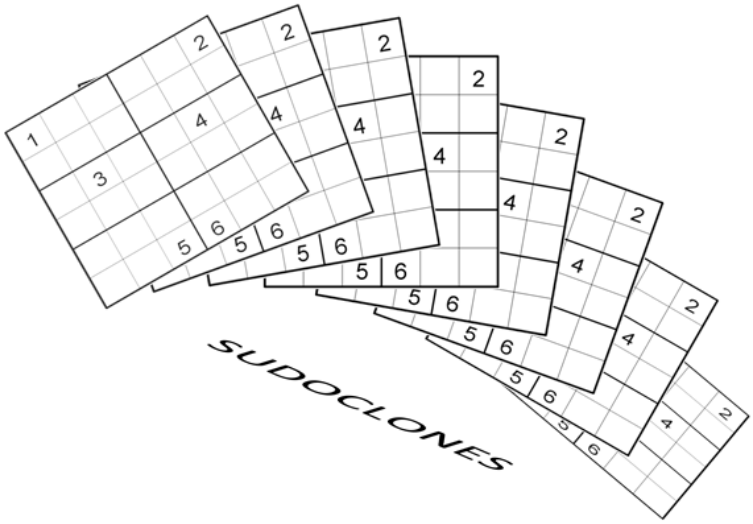


INSTRUCTION BOOKLET

Sudokus by **Sylvain Caudmont**

30, June 01-02, July 2012

2 hours

1. Frame	40
2. Arrow	45
3. Thermometer	50
4. Tri Outside	55
5. Highest difference	60
6. Renban groups	65
7. Parity Calcdoku	70
8. No knight Step	75
9. Killer	85
10. Little killer	95
11. Skyscrapers	100
12. Different	120
13. Extra region Greater than	140
Total	1000

Time bonus is applied for complete solving:
Total Points = (Earned Points) / (Claim Bonus Time) * (120 minutes)

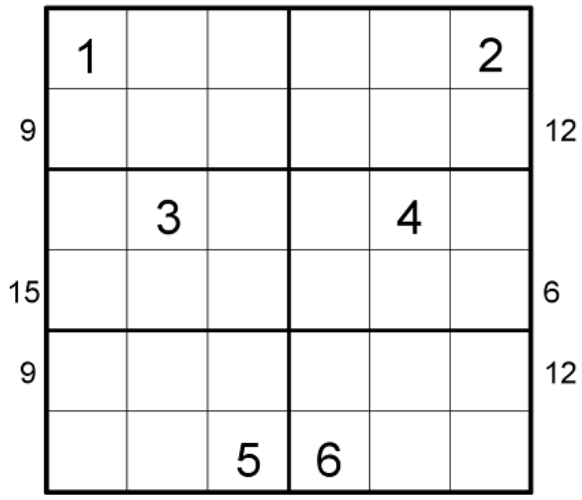
Special thanks to
Geoffroy Hermelin and Timothy Doyle for test solving
Deb Mohanty and LMI for hosting the contest

All grids of the IB are 6*6. **Every row, column, and bold-lined region contain digit 1 to 6.**
All grids of the test are 9*9. **Every row, column, and bold-lined region contain digit 1 to 9.**

For each grid, codes are the two main diagonals : from top left to bottom right and from top right to bottom left.

FRAME 40 points

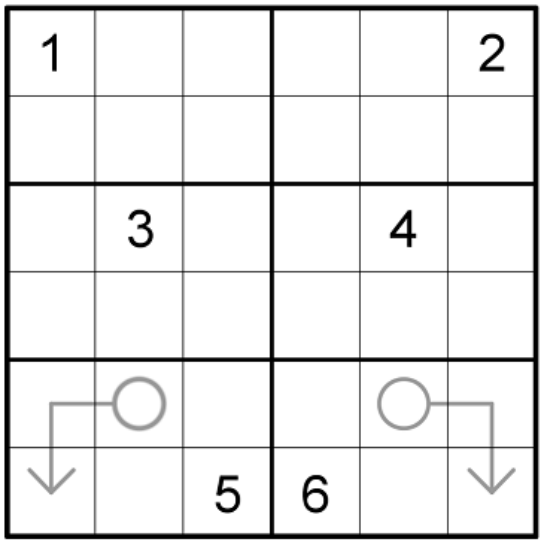
Outside clues correspond to the sum of the first three digits in the corresponding direction.



	1	5	6	4	3	2	
9	4	2	3	1	6	5	12
	2	3	1	5	4	6	
15	5	6	4	2	1	3	6
9	6	1	2	3	5	4	12
	3	4	5	6	2	1	

ARROW 45 points

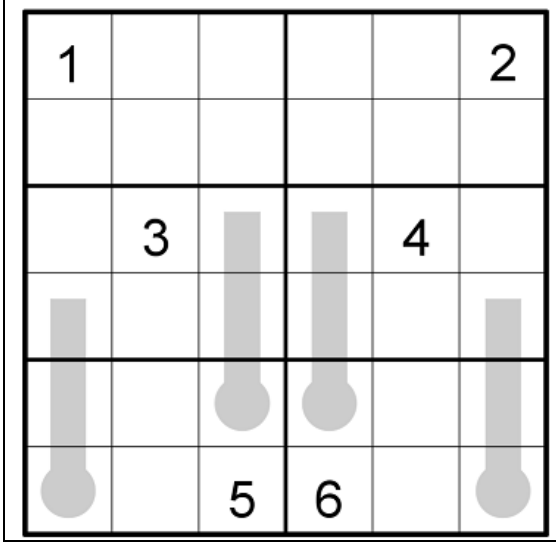
Arrows are drawn in the grid. Within an arrow, the digit in the circled cell is equal to the sum of digits on the rest of the arrow.



1	5	4	3	6	2
3	2	6	4	1	5
5	3	2	1	4	6
6	4	1	5	2	3
4	6	3	2	5	1
2	1	5	6	3	4

THERMOMETER 50 points

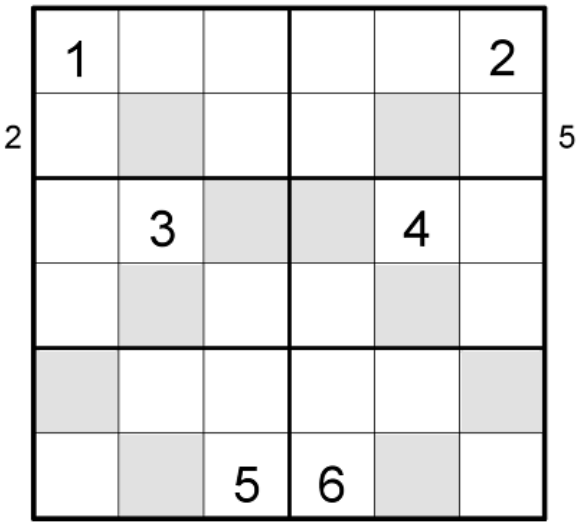
Thermometers are drawn in the grid. Digits on a thermometer are strictly increasing from the bulb.



1	5	3	4	6	2
6	4	2	1	5	3
2	3	6	5	4	1
5	1	4	3	2	6
4	6	1	2	3	5
3	2	5	6	1	4

TRI OUTSIDE 55 points

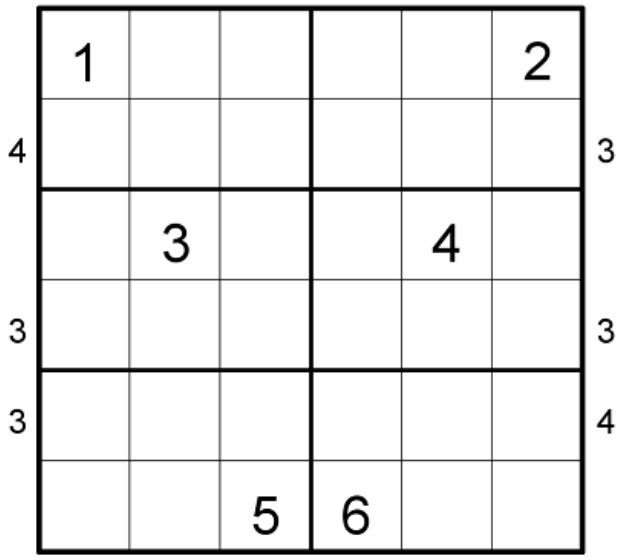
The grey cells contain only three different digits. Outside clues correspond to digits which are in the first three cells in the corresponding direction.



	1	5	6	4	3	2	
2	4	2	3	1	6	5	5
	5	3	1	2	4	6	
	2	6	4	5	1	3	
	6	4	2	3	5	1	
	3	1	5	6	2	4	

HIGHEST DIFFERENCE 60 points

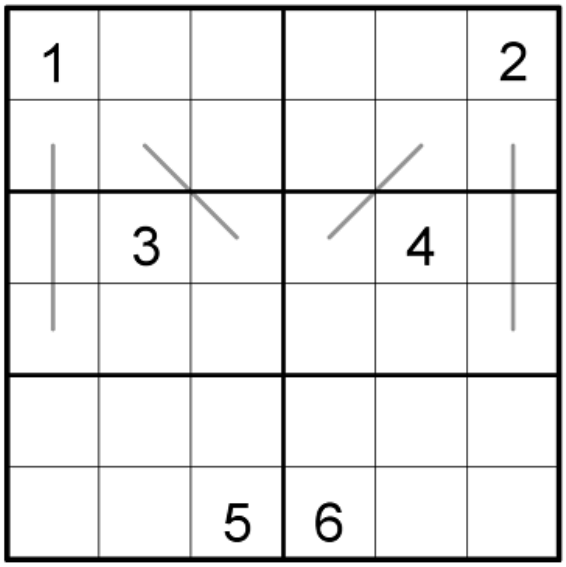
Outside clues correspond to the highest difference between two of the first three cells in the corresponding direction.



	1	4	3	5	6	2	
4	6	5	2	4	1	3	3
	5	3	6	2	4	1	
3	4	2	1	3	5	6	3
3	3	6	4	1	2	5	4
	2	1	5	6	3	4	

RENBAN GROUPS 65 points

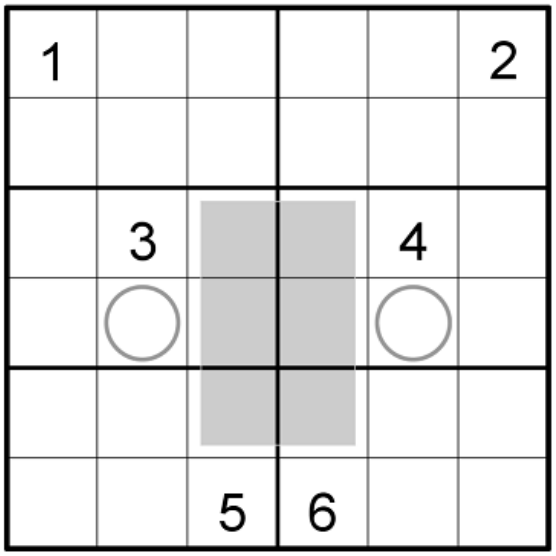
Cells connected with a grey line must contain a set of consecutive digits.



1	5	4	3	6	2
6	2	3	5	1	4
5	3	1	2	4	6
4	6	2	1	3	5
2	1	6	4	5	3
3	4	5	6	2	1

PARITY CALCDOKU 70 points

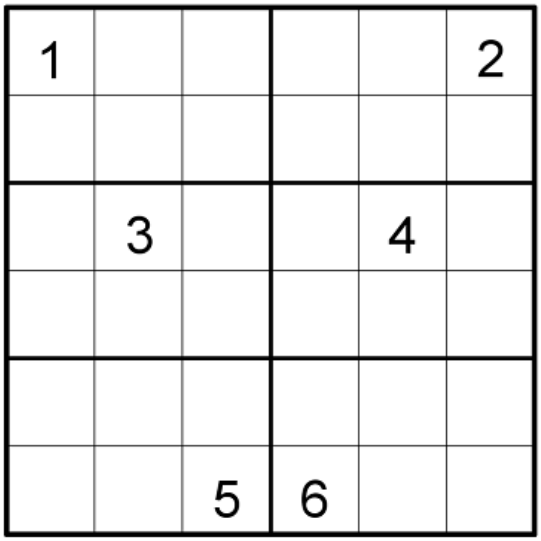
All the cells with a circle contain digits of the same parity.
In the grey rectangles, the bottom line is equal to the sum of the two upper lines.



1	5	6	4	3	2
3	2	4	1	5	6
6	3	1	2	4	5
5	4	2	3	6	1
2	6	3	5	1	4
4	1	5	6	2	3

NO KNIGHT STEP 75 points

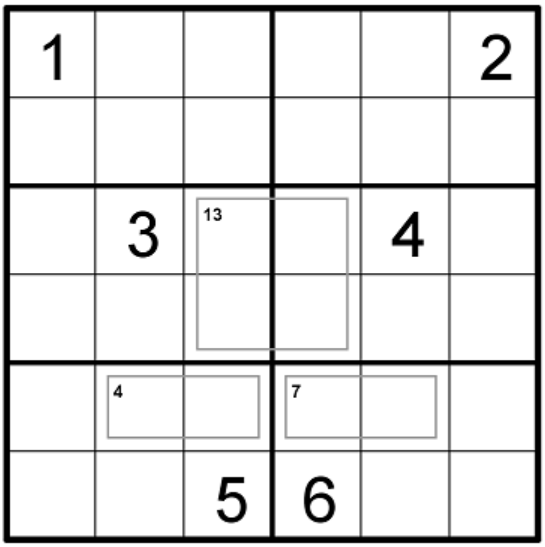
Two cells separated by a knight step (referring to chess) must contain different digits. A knight move two cells in a direction, then one cell orthogonally.



1	5	4	3	6	2
2	6	3	4	5	1
6	3	1	2	4	5
5	4	2	1	3	6
4	2	6	5	1	3
3	1	5	6	2	4

KILLER 85 points

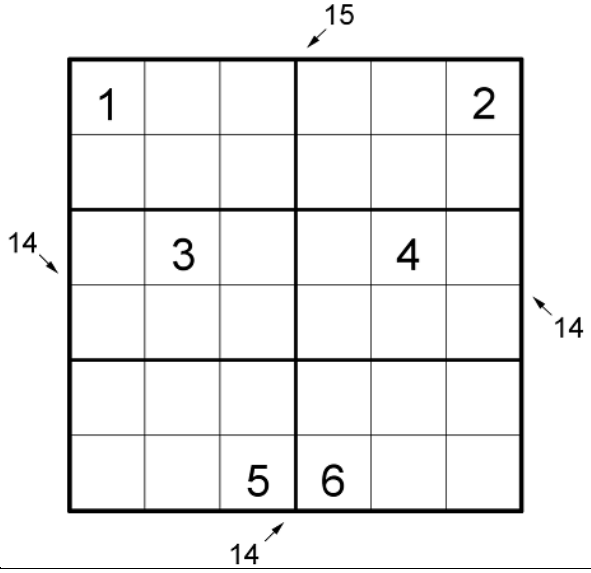
The value on the top-left corner of a shaded area is equal to the sum of this area digits.
No digit can repeat within an area.

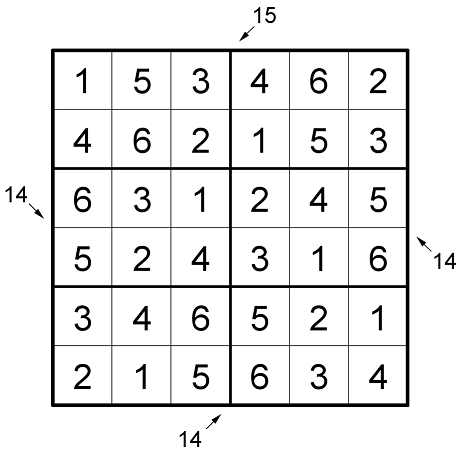


1	5	6	4	3	2
3	4	2	1	6	5
2	3	1	5	4	6
5	6	4	3	2	1
6	1	3	2	5	4
4	2	5	6	1	3

LITTLE KILLER — 95 points

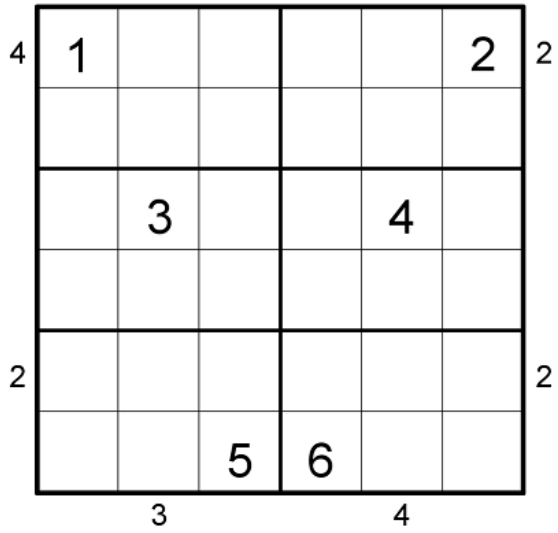
Outside clues indicate the sum of the digits of the corresponding diagonals.

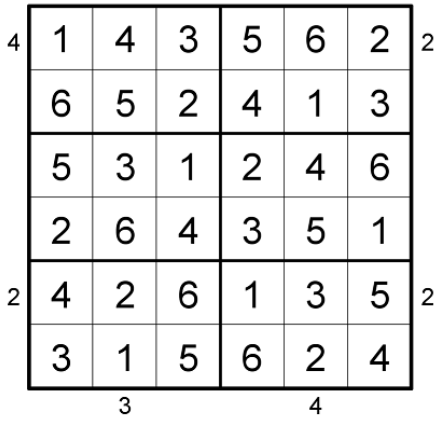




SKYSCRAPERS — 100 points

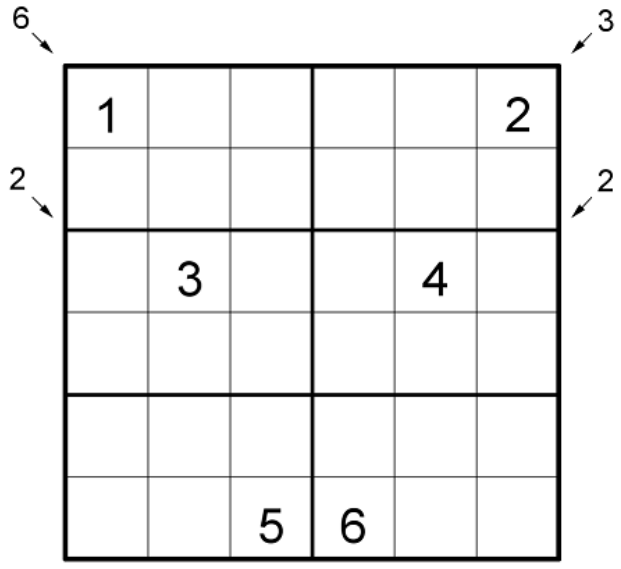
Clues outside the grid correspond to the number of skyscrapers which are visible in this row or column, starting from this point, knowing that a skyscraper which height is superior to another masks this last one.

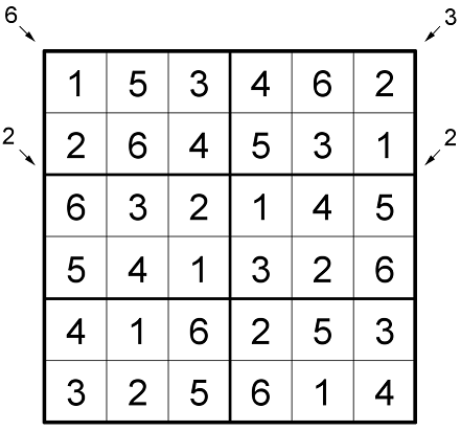




DIFFERENT — 120 points

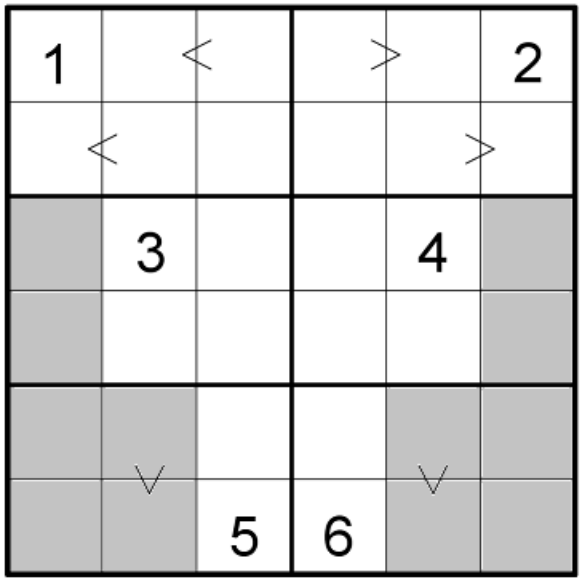
Outside clues indicate how many different digits are in the corresponding diagonals.





EXTRA REGION GREATER THAN — 140 points

Grey extra regions must contain the digits from 1 to 9.
All inequalities must be respected.



1	5 <	6	4 >	3	2
2 <	4	3	1	6 >	5
5	3	1	2	4	6
4	6	2	5	1	3
6	2 ∨	4	3	5 ∨	1
3	1	5	6	2	4