10th Sudoku Mock Test

Sunday, February 15, 2009

by
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Miniatures (45 minutes)
14:30 – 15:15 IST (+5:30 GMT)

1	C	Hidden Skyscrapers	36	points
2	A	Extraregions	12	points
3	U	Lines (Čárky)	15	points
4	C	AntiChess	23	points
5	H	Killer	29	points
6	Y	Isogeometrico	31	points
7	G	Even or Odd	20	points
8	O	Snowdrops	28	points
9	T	Irregular	17	points
10	R	Mix	41	points
11	O	Diagonal	25	points
12	C	Prime Number Sums	34	points
13	H	Shapes	48	points
	⏱	Times Bonus for solving all the puzzles per each minute saved in the round	5	points
		Total (without Bonus)	359	points

Adult sudokus (90 minutes)
15:30 – 17:00 IST (+5:30 GMT)

1	Snowdrops	67	points
2	Isogeometrico	71	points
3	Nonconsecutive Irregular	83	points
4	Lines (Čárky)	42	points
5	Diagonal Kropki	96	points
6	Extraregions	59	points
7	Hidden Skyscrapers	89	points
8	Arrows	133	points
⏱	Times Bonus for solving all the puzzles per each minute saved in the round	5	points
	Total (without Bonus)	640	points

Miniatures

Standard sudoku rules on the numbers of 1 to 6 mean fill in the grid so that every row, column and 2×3 box contains all different numbers from 1 to 6.

1 C – Hidden Skyscrapers (36 points)

Apply standard sudoku rules on the numbers 1 to 6. Numbers correspond with heights (1–6) of skyscrapers. If there is an arrow in a cell, then the corresponding number in the cell means how many skyscrapers are seen from this cell in the direction given by the arrow.

Example: see FED-variant No. 66

http://www.fed-sudoku.eu/sudokuplay/0066.swf

or Grad Prix Ostrava 2008 (Czech and English version together)

http://web.ff.cuni.cz/ vetrovc5/GPOstrava2008.pdf

2 A – Extraregions (12 points)

Apply standard sudoku rules on the numbers 1 to 6. There are exactly numbers of 1 to 6 in the colored extraregions (they can be disjoint).

3 U – Lines (15 points)

Apply standard sudoku rules on the numbers 1 to 6. The horizontal line in the cell means that this number is a sum of two horizontal adjacent cells. The vertical line in the cell means that this number is a substraction of two vertical adjacent cells. If there are both horizontal and vertical lines in the same cell, both rules apply. All horizontal sums and all vertical subtractions are marked in the puzzle.

Example

And see also FED-variant No. 48

http://www.fed-sudoku.eu/sudokuplay/0048.swf

or Grand Prix Hranice 2008 (only Czech version, Čárky)

http://web.ff.cuni.cz/ vetrovc5/GPHranice2008.pdf

4 C – Anti Knight (23 points)

Apply standard sudoku rules on the numbers 1 to 6. Moreover, in all the puzzle, there does an anti–Knight rule hold, i.e., cells with Knight step away from each other cannot contain the same digit.

Example: see FED-variant No. 136 or No. 137

http://www.fed-sudoku.eu/sudokuplay/0136.swf

http://www.fed-sudoku.eu/sudokuplay/0137.swf

or the 9th Mock Test by Gaurav Korde

5   H – Killer (29 points)

Apply standard sudoku rules on the numbers 1 to 6. The sum of the numbers in each outlined cage is equal to the corresponding number given in the corner of the outline. No number is repeated within a given outlined cage.

6   Y – IsoGeometrico (31 points)

Apply standard sudoku rules on the numbers 1 to 6. In the puzzle, there are (geometrical) shapes for which it holds that sum of numbers on their bound is the same *odd* number for all ones.

Example: see FED-variant No. 156

http://www.fed-sudoku.eu/sudokuplay/0156.swf

7   G – Even or Odd (20 points)

Apply standard sudoku rules on the numbers 1 to 6. In the colored cells, there are only even or odd numbers.

Example: see FED-variant No. 108

http://www.fed-sudoku.eu/sudokuplay/0108.swf

8   O – Snowdrops (28 points)

Apply standard sudoku rules on the numbers 1 to 6. There are flowering snowdrops among spring water streams. All the given numbers represent centers of the snowdrop flowers (circled numbers) for which petals (cells adjoint to the center by edge) holds that they are nonconsecutive with snowdrop center. And moreover, there are outlines water streams those are even or odd numbers (even are green full and odd are blue dashed).

Example

And see also FED-variant No. 155

http://www.fed-sudoku.eu/sudokuplay/0155.swf

9   T – Irregular (17 points)

Fill the puzzle so that every row, every column, and every outlined T-shaped region contains the numbers 1 to 6.

10   R – Mix (41 points)

Apply standard sudoku rules on the numbers 1 to 6. In the puzzle, there are two cages with the sums 16 and 19, respectively. Attention! The numbers in the cages may be repeated! Moreover, there is a kropki-black dot, i.e., the corresponding adjacent numbers are in the relation that one is a double of the other one. And also, there is a greater than sign between two adjacent numbers. The last (nontraditional) sign is an arrow that indicates that the number in the arrow-cell is at least once more time in the direction given by the arrow.

11   O – Diagonal (25 points)

Apply standard sudoku rules on the numbers 1 to 6 with conditions on two main diagonal indicated by dashed lines.

12   C – Prime Number Sums (34 points)

Apply standard sudoku rules on the numbers 1 to 6. In the puzzle, there are five lines along which the sum of the numbers is a prime number. Prime numbers are different for each line.

13   H – Shapes (48 points)

Apply standard sudoku rules on the numbers 1 to 6. In the puzzle, there are three shapes (one is the letter H). And moreover, the x-condition hold, i.e., if the number x is x-times in one shape, then one of occurrences of this number is circled. E.g., if there is only one number 1 in a shape, then it must be circled; if there are five numbers 5 in a shape, then one of 5s is circled.

Example

Adult sudokus

Standard sudoku rules mean fill in the grid so that every row, column and 3×3 square contains all different numbers from 1 to 9.

1 Snowdrops (67 points)

Apply standard sudoku rules. There are flowering snowdrops among spring water streams. All the given numbers represent centers of the snowdrop flowers (circled numbers) for which petals (cells adjoint to the center by edge) holds that they are nonconsecutive with snowdrop center. And moreover, there are outlines water streams those are even or odd numbers (even are green full and odd are blue dashed).

Example

And see also FED-variant No. 155
http://www.fed-sudoku.eu/sudokuplay/0155.swf

2 IsoGeometrico (71 points)

Apply standard sudoku rules. In the puzzle, there are (geometrical) shapes for which it holds that sum of numbers on their bound is the same *odd* number for all ones.

Example: see FED-variant No. 156
http://www.fed-sudoku.eu/sudokuplay/0156.swf

3 Nonconsecutive Irregular (83 points)

Fill the puzzle so that every row, every column, and every outlined region (it can be disconnected) contains the numbers 1 to 9. All numbers are nonconsecutive.

4 Lines (42 points)

Apply standard sudoku rules. The horizontal line in the cell means that this number is a sum of two horizontal adjacent cells. The vertical line in the cell means that this number is a substraction of two vertical adjacent cells. If there are both horizontal and vertical lines in the same cell, both rules apply. All horizontal sums and all vertical subtractions are marked in the puzzle.

Example

And see also FED-variant No. 48

http://www.fed-sudoku.eu/sudokuplay/0048.swf

or Grand Prix Hranice 2008 (only Czech version, Čárky)

http://web.ff.cuni.cz/ vetrovc5/GPHranice2008.pdf

5 Diagonal Kropki (96 points)

Apply standard sudoku rules. This puzzle is similar to a standard kropki sudoku but, in this puzzle, relations are between diagonally cells. There are three types of signs (white dot, black dot and cross). A white dot indicates that the difference between diagonally adjacent cells is 1. A black dot means that one number is the double of the other one (between the numbers 1 and 2, there is always a black dot). And a cross is between cells that have same numbers. All the signs are marked in the sudoku grid with application of the following sign priority rule: cross, black dot, white dot (e.g., if one diagonal pair is 5–6 and the second pair is 4–8, then black dot is placed between the numbers).

Example

6 Extraregions (59 points)

Apply standard sudoku rules. There are exactly numbers from 1 to 9 in each colored extraregion. These extraregions are overlaped in some cells.

Example: see FED-variant No. 109

http://www.fed-sudoku.eu/sudokuplay/0109.swf

7 Hidden Skyscrapers (89 points)

Apply standard sudoku rules. Numbers correspond with heights (1-9) of skyscrapers. If there is an arrow in a cell, then the corresponding number in the cell means how many skyscrapers are seen from this cell in the direction given by the arrow.

Example: see FED-variant No. 66

http://www.fed-sudoku.eu/sudokuplay/0066.swf

or Grad Prix Ostrava 2008 (Czech and English version together)

http://web.ff.cuni.cz/ vetrovc5/GPOstrava2008.pdf

8 Arrows (133 points)

Apply standard sudoku rules. Moreover, there are 5 loops–cycles given by arrows in the puzzle. Each arrow belongs to exactly one cycle, every arrows are marked. Each cycle is a sequence of arrows which contains numbers 1 to 9, every number (with an arrow) point to the next number, i.e., 1 points to 2, 2 points to 3, ..., 9 points to 1 (cyclical property). Next arrow is always in the same column or row.

Acknowledgement

Good luck to everybody!