# MOCK TEST 15 MARCH 7, 2010 INSTRUCTION BOOKLET <br> 90 minutes <br> 0703 points + TIME BONUS <br> Mock will be open for a period of 24 hrs 

## Time Limits: 90 minutes

| Sr No. | Puzzle Type | Points |
| :---: | :---: | :---: |
| 1 | Mirror Sudoku | 40 |
| 2 | Diagonally Consecutive | 75 |
| 3 | Repeatable Extra Region | 90 |
| 4 | Blackout Sudoku | 60 |
| 5 | Circles Sudoku | 90 |
| 6 | Equation Sudoku | 60 |
| 7 | Descriptive Pair Sudoku | 99 |
| 8 | Arrow Path Sudoku | 78 |
| 9 | Wrong Skyscraper | 111 |
|  | TOTAL | $\mathbf{0 7 0 3}$ |

Time Bonus Rule: For every complete minute saved 10 points will be awarded as bonus. Time bonus will be award only if all the puzzles are submitted correctly.

## 1] Mirror Sudoku:

Apply standard Sudoku rules. The boxes $1 \& 9$ and $3 \& 7$ will be mirror image of each other ie: $R(m) C(n)=R(9-$ m)C(9-n) for the four boxes.

Eg can be seen in the following link: http://www.argio-logic.net/img/mirror1.swf

## 2] Diagonally Consecutive:

Apply standard Sudoku rules. All the diagonally adjacent cells which are consecutive are marked by a line.

The grid is just a visual example and not a puzzle.


## 3] Repeatable Extra Region:

Apply standard Sudoku rules. There are two extra regions of 9 cells each. Number can repeat in the extra region. However both the regions should have same set of numbers (each number will occur same number of times).
Eg: If one region contains the numbers $1,1,2,3,3,4,5,5,7$ then other region will also contain 1,1,2,3,3,4,5,5,7.

The grid is just a visual example and not a puzzle.

| 5 | 8 | 1 | 4 | 3 | 2 | 7 | 9 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | 4 | 9 | 6 | 8 | 5 | 2 | 3 | 1 |
| 6 | 2 | 3 | 9 | 7 | 1 | 4 | 5 | 8 |
| 8 | 9 | 6 | 2 | 5 | 7 | 3 | 1 | 4 |
| 3 | 7 | 5 | 8 | 1 | 4 | 6 | 2 | 9 |
| 4 | 1 | 2 | 3 | 9 | 6 | 8 | 7 | 5 |
| 9 | 3 | 7 | 5 | 4 | 8 | 1 | 6 | 2 |
| 2 | 5 | 4 | 1 | 6 | 3 | 9 | 8 | 7 |
| 1 | 6 | 8 | 7 | 2 | 9 | 5 | 4 | 3 |

4] BlackOut Sudoku:
Each row/column/3x3 region has one blacked out cell. One cant fill any number in the blacked out cell. Fill the grid such that every row/column and $3 \times 3$ region contains all digits except one.

|  |  | 1 | 7 |  | 2 |  | 6 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 2 |  | 4 |  |  | 1 |  |
|  | 4 | 7 | 3 | 5 |  |  |  |  |
| 3 |  | 9 |  |  | 8 |  |  | 2 |
|  | 7 | 5 |  |  |  | 1 | 8 |  |
| 1 |  |  | 5 |  |  | 7 |  | 3 |
|  |  |  |  | 6 | 4 | 8 | 5 |  |
|  | 5 |  |  | 7 |  | 2 |  |  |
| 8 | 9 |  | 1 |  | 5 | 6 |  |  |

## 5] Circles Sudoku:

Apply standard Sudoku rules. The four cells through which a circle passes contains the same four digits present on the circle. The numbers has to be entered in the same order ie the circles can only be rotated and cannot be flipped.

The grid is just a visual example and not a puzzle.


## 6] Equation Sudoku:

Apply standard Sudoku rules. There are 9 letters in the grid each representing a number from 1 to 9 . The numbers outside the grid suggest the sum of the digits represented by the letters in the row or column.

| B |  |  |  | J |  | C | E | D | 27 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G |  |  |  | H |  |  | $J$ | A | 20 |
|  |  |  | D | A | C |  |  | G | 17 |
| H |  | B |  |  |  |  |  |  | 6 |
|  |  |  | B | G | D |  |  |  | 6 |
|  |  | E |  |  |  | G |  | B | 9 |
|  | F |  |  |  | J |  |  |  | 16 |
| C | B |  | A | E |  |  |  | H | 24 |
| A |  |  |  | B |  |  |  | $J$ | 14 |
| 20 | 8 | 7 | 8 | 27 | 20 | 10 | 15 | 24 |  |

7] Descriptive Pair Sudoku:
Apply standard Sudoku rules. Each pair of digits $A$ and $B$ on the outside means that at least one of the following are true in the row/column:
a) There is a digit A in the Bth cell from the edge.
b) There is a digit B in the Ath cell from the edge.


## 8] ArrowPath Sudoku:

Apply standard Sudoku rules. In a $3 \times 3$ box there are arrows in each cells. The arrows in a particular $3 \times 3$ box, 1 points to 2,2 points to $3, \ldots ., 8$ points to 9 and 9 points to 1 .

The grid is just a visual example and not a puzzle.

A proper example can be seen at http:// sachsentext.de/en/arrow_path_sudoku1.htm

|  | Q |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $\Rightarrow$ | 『 |  |  |  |  |  |
| $\Rightarrow$ | 介 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

9] Wrong Skyscraper:
Apply standard Sudoku rules. In a skyscraper Sudoku, every digits represents a tower with a height equivalent to its size ( 9 being the tallest tower and 1 being the smallest). One can see several skyscrapers from one side of a row/column depending upon the position of the numbers. The numbers outside the grid are +1 or -1 than the actual skyscrapers seen from that side.


