

WPF
SUDOKU/PUZZLE GRAND PRIX 2014

# WPF suDOKU gP 2014 

## ROUND 1

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Organised by


## 1 Classic Sudoku

 (26 points)Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $3^{\text {rd }}$ row of digits, followed by the $6^{\text {th }}$ column of digits.

## 2 Classic Sudoku (28 points)

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $8^{\text {th }}$ row of digits, followed by the $2^{\text {nd }}$ column of digits.

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

CB

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

## 3 Classic Sudoku (44 points)

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $4^{\text {th }}$ row of digits, followed by the $7^{\text {th }}$ row of digits.


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

B

## 4 Classic Sudoku (46 points)

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $4^{\text {th }}$ row of digits, followed by the $5^{\text {th }}$ column of digits.

| B |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | $\mathbf{A}$

## 5 Classic Sudoku

(55 points)
Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $5^{\text {th }}$ row of digits, followed by the $2^{\text {nd }}$ column of digits.

## 6 Classic Sudoku

(78 points)
Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined $3 \times 3$ region.

Answer Key: Enter the $6^{\text {th }}$ row of digits, followed by the $5^{\text {th }}$ column of digits.


## 7 Diagonal Sudoku (31 points)

Apply classic sudoku rules. Additionally, each digit appears exactly once in the two main diagonals.

Answer Key: Enter the $9^{\text {th }}$ row of digits, followed by the $2^{\text {nd }}$ column of digits.

## 8 Outside Sudoku

(46 points)
Apply classic sudoku rules. Additionally, digits given outside the grid must appear in the first region (three cells) in that row/ column.

Answer Key: Enter the $8^{\text {th }}$ row of digits, followed by the $3^{\text {rd }}$ column of digits.



| B |
| :--- |
|          <br>    7     3 <br> 3     1    <br>  8  5   2   <br>          <br>      9  4  <br>     1     |

## 10 Consecutive Sudoku

(42 points)

Apply classic sudoku rules. Additionally, if a black dot is given between two adjacent cells, then the two numbers in those cells must be consecutive. If a black dot is not given, the two digits cannot be consecutive.

Answer Key: Enter the $7^{\text {th }}$ row of digits, followed by the $9^{\text {th }}$ row of digits.


## 11 Extra Region Sudoku

 (36 points)Apply classic sudoku rules. Additionally, each digit appears exactly once in each of the extra shaded regions.

Answer Key: Enter the $3^{\text {rd }}$ row of digits, followed by the $5^{\text {th }}$ row of digits.

## 12 Sudoku with Stars

 (55 points)Place either a digit from 1 to 7 or a star in each empty cell, so that each digit appears exactly once in each row, column and outlined region. There must be exactly two stars in in each row, column and outlined region. Stars cannot be placed in adjacent cells that touch even at a corner.

Answer Key: Enter the $2^{\text {nd }}$ row of digits, followed by the $9^{\text {th }}$ row of digits. Use X for stars in the answer entry.

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



## 13 Determinant Sudoku

(26 points)
Apply classic sudoku rules. Additionally, the determinants of $2 \times 2$ matrices are given in the center of the four cells. The determinant of a $2 \times 2$ matrix is $a^{*} d-b^{*} c$, where a is the top left, $b$ is the top right, $c$ is bottom left and $d$ is the bottom right element.

Answer Key: Enter the $8^{\text {th }}$ column of digits, followed by the $9^{\text {th }}$ column of digits.

## 14 Crossnumber Sudoku (35 points)

Fill in the white cells with given number words. Then, using written digits solve the sudoku, following the classic sudoku rules.

Answer Key: Enter the $5^{\text {th }}$ row of digits, followed by the $8^{\text {th }}$ row of digits.

| 6 | 5 | 2 | 7 |  | 1 | 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 65 |  | -27 |  |  | 13 |  |
|  | 9 |  |  | 6 |  | 8 |  |
| 4 | 2 | 1 | 8 |  |  | 7 |  |
|  | 42 |  | 18 |  | 7 |  |  |
|  | 5 |  |  | 4 |  | 2 |  |
| 1 | 6 |  |  |  |  |  |  |
|  |  |  |  |  | 7 |  |  |
|  | 8 | 3 | 2 |  |  |  |  |



