## France/Belgium

 WPC Test 2011Part 5

## Part 5 - Sprint to the finish line - $\mathbf{2 5}$ minutes

1. Crypto ..... 15
2. Sum Skyscrapers ..... 20
3. Arrows ..... 20
4. Fillomino ..... 20
5. Trid ..... 20
6. Tapa ..... 20

Total: 115 points + time bonus ( $5 \mathrm{pts} /$ minute)


## 1. Crypto

In all the puzzles of this round, digits have been replaced by letters from A to P ( O excluded). Each letter represents the same digit from 1 to 9 in all the puzzles. Different letters can represent the same digit. Find the value of each letter and enter it into the table; also solve the 5 puzzles.
(Partial points: 1 point per letter found)

## 2. Sum Skyscrapers

(20 points)
The grid represents a group of skyscrapers. Each row and column contains skyscrapers of different heights (from 1 to 5). The numbers outside the grid indicate the sum of the heights of the skyscrapers that can be seen from that direction (a building located behind a taller one in the same row is completely hidden). Fill in the grid with the heights of the skyscrapers.

## 3. Arrows

(20 points)
Enter an arrow (horizontal, vertical, or diagonal) into each of the 16 cells surrounding the grid. Each digit inside the grid indicates the number of arrows that point at it. Each arrow points to at least one square of the grid.

## 4. Fillomino

(20 points)
Decompose the diagram into blocks of cells, and enter numbers into the cells, in such a way that each number indicates the area of the block containing it. Blocks of the same size cannot touch horizontally or vertically (but can touch diagonally). Two given numbers may belong to the same block, and there may be blocks which do not contain any of the given numbers.

## 5. Trid

(20 points)
Enter digits from 1 to 5 into the circles, so that each line contains different digits. The values in the triangles indicate the sum of the 3 digits located at the vertices of the triangle.

## 6. Tapa

(20 points)
Paint some empty cells black to form a continuous wall of black cells (connected to each other horizontally or vertically). No $2 \times 2$ square can be completely black. The number(s) in a square indicate the lengths of the consecutive blocks of black cells among the adjacent squares (horizontally, vertically or diagonally): each number represents one block of black cells, and when there is more than one number in a square, the black cell blocks must be separated by at least one white cell. The order in which the numbers are given is irrelevant.


Sum Skyscrapers (1-5)


Arrows


Trid (1-5)


Fillomino

| C |  |  | H |  | N |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | K |  |  |  | I |
|  |  |  |  |  |  | M |
| N |  | L | J |  |  |  |
| I |  | B | H | A | D |  |
|  |  |  |  |  |  |  |
|  | G |  |  | K | E |  |

Tapa


## Crypto

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | P |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

