

Part IV

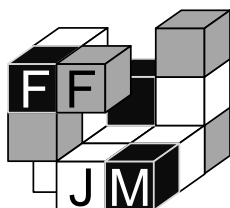
Name

WPC French Qualification 2006

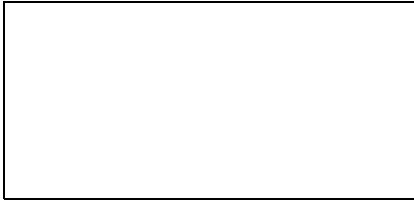
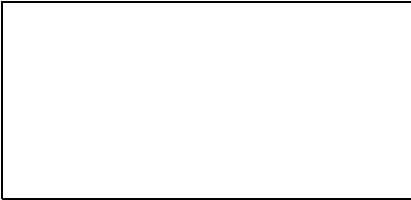
This round is divided into three stages of 20 minutes each.

A correct solution of any stage is worth 50 points. An incorrect solution is rewarded by a number of points depending on the difference between the number of correct entries and incorrect entries. If N is the total number of entries to be filled in and d the difference correct-incorrect, the corresponding points are: $5 * \text{floor}(10 * d/N)$ (if $d > 0$).

As in the other parts, a candidate with a correct problem before the end of any stage will be credited 5 points for all remaining blocks of two minutes. If there is a mistake, the sheet of paper will be returned if it's the first time it happens (one chance is given per stage and per puzzler).



Part IV



1. Magnets (20 minutes)

50 points

The grid is made up of magnetic and non-magnetic plates. Each magnetic plate has two halves: one positive and one negative. Halves with the same symbol cannot touch each other horizontally or vertically. The numbers to the right of the grid and below it indicate the number of magnetic halves in that particular row or column.

In the next stage, you'll enter a single digit from 1 to 9 into each magnetic half-plate so that, in each row and column, the sums of the numbers (with signs given by their polarity) in each consecutive group of magnetic halves are equal to the values given to the left of the grid and above it, in that order. No digit can be repeated within a single group (irrespective of polarity). The non-magnetic plates do not contain any digits.

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	?	?										5	3		
	?	?										3	3		
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?	?	?										4	6		
?	?	?										4	5		
?	?	?										4	4		
			4	4	5	5	5	3	4	4	4	5	6	3	+
			3	6	5	4	4	4	3	4	5	5	5	4	-

Part IV

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2. Cross-sums (20 minutes)

50 points

Enter a single digit from 1 to 9 into each magnetic half-plate of the left part of the grid so that, in each row and column, the sums of the numbers (with signs given by their polarity) in each consecutive group of magnetic halves are equal to the values given to the left of the grid and above it, in that order. No digit can be repeated within a single group (irrespective of polarity). The non-magnetic plates do not contain any digits.

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Part IV		
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3. More cross-sums (20 minutes) 50 points

Enter a single digit from 1 to 9 into each magnetic half-plate in the right part of the grid so that, in each row and column, the sums of the numbers (with signs given by their polarity) in each consecutive group of magnetic halves are equal to the values given to the left of the grid and above it, in that order. No digit can be repeated within a single group (irrespective of polarity). The non-magnetic plates do not contain any digits.

[illegible]