

DUTCH PUZZLE AND SUDOKU CHAMPIONSHIP SATURDAY JUNE 29, 2019

INSTRUCTION BOOKLET

Welcome to the Dutch Puzzle and Sudoku Championships 2019.

The championships are organized by the Dutch puzzle association (WCPN) and hosted by ORTEC. ORTEC is one of the world's leaders in optimization software and analytics solutions.

In this booklet you will find all necessary information about the championships; the schedule of the day, rules and regulations and example puzzles, including solutions. You will also find the value of the puzzles (the amount of points), so you can decide in advance what puzzles you want to solve.

Reading this booklet will prepare you for a nice day full of puzzles.

Enjoy!

WCPN Saskia Benedictus René Gilhuijs Richard Stolk



Rules

These are the instructions of the WCPN Dutch Puzzle and Sudoku Championships 2019. Any questions related to these instructions can be discussed in the message board on the website of WCPN: www.wcpn.nl.

Competition Hall Rules

1. Each competitor must choose a desk before the start of the first of the preliminary rounds. They must use the same desk in all of the preliminary rounds. They should ensure that they are at their desk ready for the start of each round. Late arrivals may not be permitted to take part in a round.

2. Prior to the start of each round competitors should clearly write their name and reference number on the front of their booklet. Competitors should not open their booklet.

3. Once the signal to start a round is given competitors may open their booklet and start solving the puzzles.

4. During each round competitors must remain silent, unless declaring completion of a round.

5. If declaring a round complete, close your booklet, clearly state 'finished' and raise your arm with the booklet in your hand. Keep the booklet raised until your booklet has been collected.

6. Competitors who have completed a round with more than five minutes remaining will be allowed to quietly leave the competition hall. Competitors who have completed a round with five minutes or less remaining must remain seated, so they don't cause unnecessary disruption to fellow competitors.

7. If any competitor needs to leave the competition hall prior to the end of a round, they will not be allowed to take any further part in that round.

8. Once the signal to finish a round is given, competitors must immediately stop solving, close their booklet, put their pen/pencil down and raise the booklet in the air. All competitors must remain seated until all booklets have been collected.

9. Puzzles can be completed in any order. (Except the puzzles in the play-offs (semi-final and final)). The points value of a puzzle is an indication of its anticipated difficulty based on the results of test solvers. Your individual solving experience may therefore differ.

10. If during solving you believe there is a problem with any puzzle, leave that puzzle and continue with another. This will be investigated upon completion of the round.

Permitted items

11. Permitted items which may be taken into the competition hall are: pens, pencils, erasers, rulers, instruction booklets (optionally annotated with notes regarding puzzle instructions and preparation notes) and blank paper. Drinks and snacks will also be allowed as long as they do not disturb other competitors (by sound or smell).

12. It is forbidden to use electronic devices in the competition hall, such as music players and headphones of any type, calculators, camera's, recording devices and mobile phones. Mobile phones have to be turned off.

Scoring and Queries

13. Points will be awarded only for 100% correctly solved puzzles. Unless explicitly indicated otherwise in this instruction booklet, there will be no partial credit. Only in case this is explicitly indicated in this instruction booklet points can be subtracted in case of a wrong answer.

14. Ten bonus points will be awarded for each full minute remaining to any competitor who has correctly solved all puzzles in a round.

15. Booklets marked with the score will be returned to the competitor. In the event of any query once a booklet has been marked, the query must be raised as soon as possible with the jury between rounds or after the last round.

16. The decision of the jury (Richard Stolk and René Gilhuijs) is final.

Breach of rules

17. Any breach of these rules may lead to a competitor being disqualified from a round or the competition, such at the discretion of the jury.

Play-offs

18. The top four competitors from the preliminary rounds, with the exception of international competitors, qualify for the play-offs.

19. The play-offs consist of two semi-finals and a final. For the semi- finals the number 1 from the preliminary rounds competes against the number 4 and the number 2 competes against the number 3. The winners of the semi-finals compete against each other in the final.

20. The play-offs are played on a podium on large sheets. Only one sheet per puzzle is available per competitor. During the play-offs competitors are only allowed to use the allocated pens and markers in various colours. The use of pencils, ballpoint pens and other writing utensils is prohibited.

21. The play-offs consist of 3 puzzles per semi final/final. After completion of a puzzle the competitor must signal silently that he or she is finished and step back. A member of the jury or someone appointed by the jury will immediately check the result. If the puzzle is correctly solved the competitor may then start on the next puzzle. If the solution is incorrect the competitor may attempt to solve the puzzle again. Only after solving the puzzle correctly may the competitor continue with the next puzzle.

22. For the semi-finals and the final the competitors will have a maximum playing time of 20 minutes. The competitor who finishes all 3 puzzles first within this period of time is the winner of the semi final/final. If both competitors have not finished their puzzles within this period of time, the competitor with the most correctly solved puzzles wins. If both competitors have an equal amount of correctly solved puzzles they are allowed to finish the puzzle that they are currently solving. The winner is the competitor who correctly solves that puzzle first.

Qualification for the WSC and WPC

23. Three competitors qualify for the WPC 2019: both finalists and the semi-finalist with the highest ranking in the preliminary rounds. If any of these persons doesn't actually take part in the WPC 2019, they will be replaced by someone assigned by WCPN.

24. Three competitors qualify for the WSC 2019: both finalists and the semi-finalist with the highest ranking in the preliminary rounds. If any of these persons doesn't actually take part in the WPC 2019, they will be replaced by someone assigned by WCPN.

SCHEDULE OF THE DAY

09:00 - 09:30		Arrival participants
09:30 - 10:00		Welcome
10:00 - 10:20	Sudoku	Round 1 – Classics
10:20 - 10:25		Mini-break; participants remain seated
10:25 - 10:50	Puzzelen	Round 1 – Warming up
10:50 - 11:10		Break
11:10 - 12:15	Sudoku	Round 2 – Mixed round
12:15 - 13:00		LUNCH
13:00 - 14:00	Puzzelen	Round 2 – Mixed round
14:00 - 14:15		Break
14:15 - 14:30	Sudoku	Round 3 – Kropki Connectie
14:30 - 14:35		Mini-break; participants remain seated
14:35 - 14:53	Puzzelen	Round 3 – Estafette
14:53 - 15:30		Break and instruction to finalists
15:30 - 15:50	Sudoku	Semi final
15:50 - 16:00		Break
16:00 - 16:20	Puzzelen	Semi final
16:20 - 16:30		Break
16:30 - 16:50	Sudoku	Final
16:50 - 17:00		Break
17:00 - 17:20	Puzzelen	Final
17:20 - 18:30		Price giving ceremony and drinks

ORTEC takes care of:
Coffee, tea and water during the day;
The lunch;
Drinks and snacks afterwards.

OVERVIEW NK SUDOKU 2019

OVERVIEW NK PUZZELEN 2019

Round	Puzzle	Points	Round	Puzzle	Points
Round 1 Classics 20 minutes	 Classic Classic Classic Classic Classic 	31 47 48 74 200	Round 1 Warming up 25 minutes	 All or one LITS Vissers Tentje Boompje Tapa Vormen Norinori Different Neighbours 	28 34 37 20 38 38 39 5 16 250
Round 2 Mixed round 65 minutes	 Fortress Renban Point to Next Rank XV Paardensprong +1 MaxAscending Scattered 	74 48 85 80 43 71 86 91 72 650	Round 2 Mixed round 60 minutes	 9. Sterrenslag 10. Dominion 11. Mathrax 12. Letterraam 13. Hokjesdenken 14. Japans Vierkant 15. Heyawacky 16. Zeeslag 17. Yajilin - Regios 18. Buren 	53 53 72 45 79 53 55 50 67 73 600
Round 3 Sprint 15 minutes	14. Kropki Connectie	150	Round 3 Sprint 15 minutes	19. Estafette	180
Semi Final 20 minutes	 Small Neighbours Consecutive Circles Classic 	5	Semi Final 20 minutes	20. Gemini Loop 21. Magic Summer 22. Koraal	
Final 20 minutes	18. Search nine 19. Maxed Quads 20. Classic		Final 20 minutes	23. Pento Regios 24. Kamertje verhuren 25. Letter Weights	

1	2						
3	4		5	7	9		
			6			5	
	9	8	7			4	
	6			3	2	1	
	8			4			
		4	8	5		6	7
						8	9

1.-4. SUDOKU Place the digits 1-9 exactly once in each row, column and 3x3 block.

1	2	3	3	4	9	8	7	6
3	4	6	5	8	7	9	2	1
8	7	9	6	1	2	3	5	4
2	9	8	7	5	1	6	4	3
4	1	3	2	6	8	7	9	5
5	6	7	4	9	3	2	1	8
6	8	1	9	7	4	5	3	2
9	3	4	8	2	5	1	6	7
7	5	2	1	3	6	4	8	9

5. FORTRESS SUDOKU

Place the digits 1-9 exactly once in each row, column and 3x3 block.

The digit in a **coloured** cell is larger than each digit in a horizontally or vertically adjacent **white** cell.

			3	8	9			
				7				
		3				6		
2		1		9		3		8
	8		7		З		2	
9				2				4
				3				
3			9	6	7			5

1	2	6	3	8	9	4	5	7
4	9	8	6	7	5	1	3	2
5	7	3	1	4	2	6	8	9
2	5	1	4	9	6	3	7	8
6	8	4	7	5	3	9	2	1
9	3	7	8	2	1	5	6	4
7	6	9	5	1	8	2	4	3
8	1	5	2	3	4	7	9	6
3	4	2	9	6	7	8	1	5

6. RENBAN SUDOKU

Place the digits 1-9 exactly once in each row, column and 3x3 block.

Digits in each coloured area form a Renban group (a group of consecutive numbers, in random order).



6	8	2	5	1	7	3	4	9
5	3	1	4	9	8	7	2	6
9	7	4	3	6	2	8	5	1
8	2	5	6	7	3	9	1	4
4	1	3	8	5	9	6	7	2
7	6	9	2	4	1	5	8	3
2	5	8	1	3	9	4	9	7
1	9	6	7	8	4	2	3	5
3	4	7	9	2	5	1	6	8

7. POINT TO NEXT SUDOKU

Place the digits 1-9 exactly once in each row, column and 3x3 block.

An arrow points in the direction of a cell that contains a digit that is exactly 1 higher than that of the cell in which the arrow is drawn.



1	7	8	6	5	9	3	2
3	5	2	9	4	0	7	1
9	8	4	7	<u></u>	6	4	5
7	6	9	3	2	5	1	4
2	9	5	4	1	7	8	6
4	∳	4	8	7	A	9	3
6	♦	3	1	9	4	5	8
8	3	4	5	6	+	2	7
5	4	7	2	8	3	6	9
	1 3 9 ₹ 2 4 6 8 5	1 7 3 5 9 ♦ 2 9 4 ♦ 6 ♦ 8 ♦ 5 4	1 7 8 3 5 2 9 ♦ 1 2 9 5 4 1 6 6 2 3 8 3 4 5 4 7	1 7 8 6 3 5 2 9 9 3 7 2 9 5 4 4 1 6 8 6 2 3 1 8 3 4 5 5 4 7 2	1 7 8 6 5 3 5 2 9 4 9 2 9 1 7 2 9 5 4 1 4 1 5 4 1 4 1 5 3 7 6 2 3 1 9 8 3 4 5 6 5 4 7 2 8	1 7 8 6 5 9 3 5 2 9 4 8 9 4 7 7 5 6 2 9 5 4 1 7 4 4 6 8 7 2 6 2 3 1 9 4 8 3 4 5 6 1 5 4 7 2 3 3 3	1 7 8 6 5 9 3 3 5 2 9 4 5 7 9 4 1 7 5 6 4 4 6 9 3 2 5 1 2 9 5 4 1 7 8 4 4 6 8 7 2 9 6 2 3 1 9 4 5 6 3 4 5 6 1 2 6 3 4 5 6 1 2 6 3 4 5 6 1 2 6 3 4 5 6 1 2 6 3 4 5 6 1 2 6 4 7 2 8 3 6

8. RANK SUDOKU

Place the digits 1-9 exactly once in each row, column and 3x3 block.

In each dotted outlined region the digits are different, and numbered in ascending order. However, not all serial numbers are given.



4	5	1	2	7	З	9	6	8
6	3	7	5	9	8	4	2	1
9	8	2	6	1	4	5	3	7
1	7.	3	4	5	95	6	8	2
5	2	9	8₅	6	1	7	4	3
8	4	6	7	3	2	1	9	5
7	9	5	3	2	6	8	1	4
3	6	4	1_0	8	7	2	5	9
2	1	8	9	4	5	3	7	6

9. SUDOKU XV

Place the digits 1-9 exactly once in each row, column and 3x3 block.

All horizontally and vertically neighbouring digits with the sum **10** are marked with **X**, **all** horizontally and vertically neighbouring digits with the sum **5** are marked with **V**.

_ x _	>	<					
χ		_ v _					
>	 < 	^		١	 / 		
	9		3	2	- v -	7	
		7		9		2	
	6		7		5		
			/		Ň)	 X
					- x -		
					>	< (- x -

8	4>	6	9	7	5	3	1	2
2	5	1	8	4	3	9	6	7
7)	<u>3</u>	Ŷ	6	2	1	4	8	5
4	9	5	3	6	2	ľ	7	8
3	8	7	1	5	9	6	2	4
1	6	2	7	8	4	5	9	З
5	1	Š١	2	9	7	8	4>	6
9	7	8	4	3	6	2	5	1
6	2	4	5	1	8	7>	3	Ŷ

10. SUDOKU PAARDENSPRONG (ANTI KNIGHT)

Place the digits 1-9 exactly once in each row, column and 3x3 block.

Two cells that can be reached by a (chess)knight-step may not contain the same digit.

							1
			5			4	
			4		7		
	1	2	3				
				7	8	9	
		9		6			
	3			5			
5							

	Х		Х	
Х				Х
		\mathcal{L}		
Х				Х
	Х		Х	

4	2	5	8	7	З	9	6	1
7	9	8	5	6	1	3	4	2
3	6	1	4	9	2	7	5	8
8	1	2	3	4	9	6	7	5
9	7	3	6	5	8	1	2	4
6	5	4	1	2	7	8	9	З
1	4	9	2	3	6	5	8	7
2	3	7	9	8	5	4	1	6
5	8	6	7	1	4	2	3	9

11. SUDOKU +1 (CONSECUTIVE)

Place the digits 1-9 exactly once in each row, column and 3x3 block. **All** neighbouring digits that are consecutive are marked with a circle.

		4	9				
	9	2	c				
1	7			<u> </u>	}		
8	0					2	
	Ŭ (}			3	7	
			>	4	9		
			8	2			

1	4	6	8	3	7	2	9	5
5	7	2	4	9	1	8	6	3
8	3	9	2	5	6	1	4	7
3	1	7	9	2	Š٩	6	8	4
6	8	4	1	7	3	Š	2	9
9	2	Š٩	6	4	8	3	7	1
2	5	1	۲ď	6	4	9	3	8
7	9	3	5	8	2	4	1	6
4	6	8	3	1	9	7	5	2

12. SUDOKU MAXASCENDING

Place the digits 1-9 exactly once in each row, column and 3x3 block.

Clues outside the grid indicate the **length** of the longest series of ascending digits in the corresponding direction.



	3	4	4		5			3		
3	3	4	7	6	2	9	5	1	8	
	2	5	9	8	4	1	7	6	3	
	6	8	1	3	5	7	2	9	4	
	8	9	5	7	6	4	3	2	1	6
	4	7	2	1	9	3	6	8	5	
4	1	6	3	5	8	2	4	7	9	
	9	3	4	2	1	6	8	5	7	
	7	2	8	9	3	5	1	4	6	
	5	1	6	4	7	8	9	3	2	3
		6			3		2	5	4	•

13. SCATTERED SUDOKU

Place the digits 1-9 exactly once in each row, column, bold outlined area and the coloured cells.

1						5		
	2			6				
		3			2			7
			4			7		
	1						6	
		9			5			
8			3			6		
				2			7	
		2						8

9 1 5 8 4 7 6 7 9 2 8 5 8 9 4 3 7 1 3 4 1 5 2 8
6 7 9 2 8 5 8 9 4 3 7 1 3 4 1 5 2 8
8 9 4 3 7 1 3 4 1 5 2 8
3 4 1 5 2 8

14. KROPKI CONNECTIE (KROPKI CONNECTION)

This round constists of four interacting 6x6-sudokus. They are connected through kropki dots:

- A white circle between two grids indicates that the neighbouring digits are consecutive.
- A black circle between two grids indicates that one of the digits is twice as big as the other digit.

- The absence of a circle indicates that there is no neighbouring digit that is either consecutive or double.

- Be aware that between digits 1 and 2 the circle can be either white or black.

Individual puzzles can have multiple solutions, but because of the kropki connection, there is only one unique solution for the whole puzzle.

For all puzzles, regular sudoku rules apply: Place the digits 1-6 in each row, column and 2x3 block. The rules for each of the four individual puzzles are given below. The position of the individual puzzles in the competition puzzle is different.

Partial points (30) will be given for each solved partial puzzle (provided that the solutions are in accordance with the unique solution for the whole puzzle). When **all** partial puzzles are solved correctly, an extra 30 bonus points can be earned.

SUDOKU - EVEN SANDWICH

Clues outside the grid show **all** the digits that have even digits as neighbours on both sides in the corresponding row or column. Clues are given in ascending order.

SUDOKU - THERMOMETERS

The digits in a thermometer are, from a bulb to each end, all different and placed in increasing order.

SUDOKU - ORDERING

Place different two-digit-numbers in each dotted outlined box. Boxes are marked in ascending order such that the smallest number is placed in box 1 and the highest number is placed in box 8.

SUDOKU - MAXASCENDING

Clues outside the grid indicate the **length** of the longest series of ascending digits in the corresponding direction.

		1 5	_	3	1	-	3 5								
	5	3	1	6	5	2	4		1	6	5	3	4	2	
	5	2	4	5	6	1	3	0	4	2	3	1	6	5	
1	3	5	6	1	4	3	2		5	3	1	6	2	4	
1	3	4	3	2	1	6	5	0	6	4	2	5	3	1	
	4	1	5	3	2	4	6	•	3	5	4	2	1	6	
	2	6	2	4	3	5	1	•	2	1	6	4	5	3	
		-		0	•		0					0	0		
		4	5	ں 3	• 6	1	0 2		2	1	6	0 5	0 4	3	4
		4 2	5 1	0 3 6	• 6 3	1 5	0 2 4	0	2 5	1 4	6 3	0 5 2	0 4 1	3 6	4 5
		4 2 1	5 1 6	0 3 6 5	● 6 3 4	1 5	0 2 4 3	0	2 5 6	1 4 3	6 3 2	0 5 2 1	0 4 1 5	3 6 4	4
		4 2 1 3	5 1 6 4	0 3 6 5 2	● 6 3 4 5	1 5 2	0 2 4 3 1	•	2 5 6 4	1 4 3 5	6 3 2 1	0 5 2 1 6) 4 1 5 3	3 6 4 2	4
		4 2 1 ² 3	5 1 6 4 3	0 3 6 5 2 1	• 3 4 5 2	1 5 2 6	0 2 4 3 1 6	•	2 5 6 4 3	1 4 3 5 6	6 3 2 1 5	0 5 2 1 6 4	41532	3 6 4 2 1	4 5 5
		4 2 1 ² 3 5 6	5 1 6 4 3	○ ³ 3 6 5 2 1 4	• 6 3 4 5 2 1	1 5 2 6 4 3	 2 4 3 1 6 5 	•	2 5 4 3	1 4 3 5 6 2	6 3 2 1 5 4	0 5 2 1 6 4 3	 4 1 5 3 2 6 	3 6 4 2 1 5	4 5 5

KROPKI CONNECTIE



Ordering

MAXASCENDING

15. SUDOKU SMALL – NEIGHBOURS

Place the digits 1-9 exactly once in each row, column and 3x3 block.

A digit in a grey cell is larger than all its horizontal and vertical neigbouring digits. **All** grey cells are given.

	7				2		1	
		5				3		
2								
				4			3	
1								7
	3			7				
								5
		2				8		
	8		7				2	

8	7	6	9	3	2	5	1	4
9	1	5	4	6	7	3	8	2
2	4	3	8	1	5	7	9	6
6	2	7	5	4	9	1	3	8
1	9	4	6	8	3	2	5	7
5	3	8	2	7	1	6	4	9
4	6	1	3	2	8	9	7	5
7	5	2	1	9	4	8	6	3
3	8	9	7	5	6	4	2	1

16. SUDOKU – CONSECUTIVE CIRCLES Place the digits 1-9 exactly once in each row, column and 3x3 block.

Digits on a circle are all different and form a consecutive series, starting at a random position on the circle and turning either clockwise or anti clockwise.



1	5	2	7	4	З	6	8	9
6	9)4	8	5	1	2	3	7
8	3	7	6	9	2	ы	4	1
9	2	8	5	3	7	1	6	4
7	6	1	2(8)4	3	9	5
3	4	5	9	1	6	٢	2	8
4	7	6	1	2	9	8	5	3
2	8	9	3	7	5	4(1	6
5	1	3	4	6	8	9	7	2

18. SEARCH NINE SUDOKU

Place the digits 1-9 exactly once in each row, column and 3x3 block.

Each arrow is pointing in the direction of the digit 9 in the respective row or column, where the number in the cell with the arrow indicates the distance (with respect to the number of cells) from the arrow to the 9.

8			5			÷		7
	5					✦		
\rightarrow	-					Ļ		
					8			
				2				
			6					
		◆					÷	$\mathbf{\uparrow}$
							6	
5					4			3

8	1	9	5	3	6	4	2	7
7	5	6	4	1	2	З	8	9
B	4	2	8	7	9	ŧ	5	6
2	7	5	3	9	8	6	1	4
1	6	4	7	2	5	9	3	8
9	8	3	6	4	1	5	7	2
6	3	\downarrow	9	8	7	2	4	5
4	9	7	2	5	3	8	6	1
5	2	8	1	6	4	7	9	3

19. SUDOKU – MAXED QUADS

Place the digits 1-9 exactly once in each row, column and 3x3 block.

Arrows are present between grey quads. In the quad pointed at by the arrow, all digits are greater than the digits in their corresponding positions in the other quad.

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

8	7	3	2	1	9	4	6	5
4	5	9	3	7.	6	1	2	8
2	6	1	4	8	5	3	7	9
3	2	5	1	4	7	8	9	6
6	1	8	5	9	3	7	4	2
7	9	4	8	6	2	5	1	3
5	4	7	6	2	8	9	3	1
9	8	2	7	3	1	6	5	4
1	3	6	9	5	4	2	8	7

1. All or One

Place a letter A, B, C in every cell such that the letters within every bold outlined region are either all equal or all different. Letters in horizontally or vertically neighbouring cells from different regions must be different.

А								
	С	Α	В				Α	
				В				
	В		В	С			Α	
	Α							
								В
С			В		В			С
		С				Α		
С								В

Δ
Δ
\overline{C}
R
C
B
Δ
B

2. LITS

Place one of the given tetrominos in every bold outlined region. Tetrominos may be rotated and/or mirrored. All tetrominos must be connected horizontally or vertically, but **no 2x2 area** may be fully covered. Tetrominos with the same shape may touch each other **only diagonally**.







3. VISSERS (ANGLERS)

Connect each fisherman (represented by a number outside the grid) with a fish in the grid, by drawing a fishing line that runs horizontally or vertically, and doesn't cross or overlap itself. The number indicates the length of the line, including the cell with the fish. Each cell belongs to a single line.



4. TENTJE-BOOMPJE (TENTS)

Attach a tent to each tree, in a horizontally or vertically adjacent cell. Cells with tents do not touch each other, **not even diagonally**. Clues outside the grid indicate the number of tents in the corresponding row or column.





5. Tapa

Blacken some cells such that all black cells are orthogonally connected and form one contiguous wall, **without** having any **2x2 area** fully blackened. Clue cells remain empty and indicate the length of each consecutive block of black cells in the eight surrounding cells. Two cell blocks indicated by two different clues must be separated by at least one white cell.





6. VORMEN (SHAPES)

Place all of the given shapes exactly once in the grid, such that they cover only different digits. Shapes can be rotated and/or mirrored, and they may touch each other but they don't overlap.



1	2	4	3	4	1
2	2	3	5	5	2
4	3	5	3	4	5
3	5	5	4	5	5
4	2	3	4	2	3
1	4	3	4	3	1

1	2	4	3	4	1
2	2	3	5	5	2
4	3	5	3	4	5
3	5	5	4	5	5
4	2	3	4	2	3
1	4	3	4	3	1

7. NORINORI

Colour two cells in each region, such that dominos are formed. Dominos may be either completely in one region or span over two regions, but can touch each other **only diagonally**.





8. DIFFERENT NEIGHBOURS

Place a digit 1-4 in each bold outlined region. Regions containing the same digit cannot touch each other, **not** even diagonally.



		1			>	\mathbf{r}			
		t		'	2	2		1	
2	1	2	1	4	1	1		т	1
	S	2		-	2	S	14	2	
4	5	2	1	4	<u> </u>		2	1	
		2	V. 1	3	11	1	2	1	3
1	4	2	4	1			1	T	
	4		L		2		+		>
	3		r	3	2	S	1	4	<u> </u>
2	2	1	2			5	1	-	>
2	ι.,	3		1		4	1	,)

9. STERRENSLAG

Place **two** stars with the size of one cell in each row, column and bold outlined region. Stars may not touch each other, **not even diagonally**.





10. DOMINION

Place dominos (blocks of 1x2 blackened cells) in the grid, that may touch each other only diagonally, in order to divide the grid into separate regions. All identical letters belong to the same region, different letters to different regions. Each region contains at least one given letter.





11. MATHRAX

Place the digits 1-8 exactly once in each row and column. Some intersections of the grid lines are marked by a number and an operator (+, -, x, /) in a circle. The number is the result of the arithmetical operation, applied to **both** pairs of diagonally opposite cells. An "E" in the circle indicates that all four adjacent digits are even; an "O" indicates that all four adjacent digits are odd.



8	4	3	1	6	7	5	2
6	2	5	8	3	1	7	4
3	1	8	7	2	4	6	5
2	5	7	6	4	8	1	3
1	7	4	2	8	5	3	6
7	8	6	3	5	2	4	_1
5	6	_1	4	7	3	2	8
4	3	2	5	1	6	8	7

12. LETTERRAAM (EASY AS ABC)

Place the letters A-D exactly once in every row and column. Some cells remain empty. Clues outside the grid indicate the **first** letter in that row or column as seen from that direction.





13. HOKJESDENKEN (BOXING)

Place all of the given birds in their own box, such that birds in adjacent boxes have no corresponding letters at all. Boxes with a black region between them don't touch each other.





14. JAPANS VIERKANT (JAPANESE SUMS)

Place digits 1-6 into some cells such that no digit is repeated within a row or column. Clues outside the grid indicate the sums of contiguous blocks of digits in the respective row or column. Each question mark represents a number (1-21). Blocks have to be separated by at least one empty cell.



15. HEYAWACKY

Colour as many cells in each bold outlined region, as is indicated by the clue in that region. All remaining white cells form one single group of connected cells. Horizontal or vertical series of white cells may not cross more than one region border. Cells with clues may be coloured.





16. ZEESLAG (BATTLE SHIPS)

Place the given fleet in the grid, with every ship segment filling a single cell. Ships are placed horizontally or vertically, and do not touch each other, **not even diagonally**. Cells with water remain empty. Clues outside the grid indicate how many cells in the corresponding row or column are occupied by ship segments.



17. YAJILIN – REGIOS (REGIONAL YAJILIN)

Colour as many cells in each bold outlined region, as is indicated by the clue in that region. Coloured cells may touch each other **only diagonally**. All remaining white cells should be traversed by a single closed loop that connects the centres of adjacent cells and doesn't cross or overlap itself.

?		1	2		2		2
2		3	1		0	2	?
				?			
		?					
				2			



18. BUREN (NEIGHBOURS)

Place digits 1-3 three times each in each row and column. Grey cells have no adjacent cells containing the same digit. White cells have at least one adjacent cell the same digit. **All** grey cells are given.



2	2	3	3	1	1	3	2	1
2	3	2	1	3	2	1	1	3
3	1	3	1	2	1	2	3	2
2	3	1	2	1	3	3	2	1
3	1	1	3	2	1	2	3	2
1	3	2	2	3	2	3	1	1
3	1	2	1	2	3	1	3	2
1	2	3	2	1	3	2	1	3
1	2	1	3	3	2	1	2	3

19. ESTAFETTE (RELAY)

Transfer the information from within the shapes to the next puzzle, without rotating or mirroring it. Digits remain digits, mines (puzzle C) will become trees (puzzle D). Partial points (indicated) will be given for each completely solved partial puzzle (provided that the solutions are in accordance with the unique solution for the whole puzzle). When all partial puzzles are solved correctly, an extra 30 bonus points can be earned.

A. CAPSULES (30 POINTS) Place the digits 1-5 exactly once in every bold outlined area. Equal digits never touch each other, **not even diagonally**. B. FILLOMINO (50 POINTS)
 Divide the grid into regions of horizontally and/or vertically connected cells. Every digit in the grid indicates the number of cells within that region.
 Regions containing the same number of cells may not touch each other horizontally or vertically. A region may contain none, one, or more than one of the given digits.





C. MIJNENVEGER (MINESWEEPER) (40 POINTS) Place a mine in some of the empty cells. Clues in the grid indicate the number of mines in the eight surrounding cells.

5 4 2 1 4 1 5 5 2 4 3 5 3 2 5 1 2 1 3 5



D. TENTJE-BOOMPJE (TENTS) (30 POINTS) Attach a tent to each tree, in a horizontally or vertically adjacent cell. Cells with tents do not touch each other, not even diagonally. Clues outside the grid indicate the number of tents in the corresponding row or column.

19. ESTAFETTE - OPLOSSING (SOLUTION)

A. CAPSULES (30 POINTS) Place the digits 1-5 exactly once in every bold outlined area. Equal digits never touch each other, **not even diagonally**.





C. MIJNENVEGER (MINESWEEPER) (40 POINTS) Place a mine in some of the empty cells. Clues in the grid indicate the number of mines in the eight surrounding cells.

B. FILLOMINO (50 POINTS) Divide the grid into regions of horizontally and/or vertically connected cells. Every digit in the grid indicates the number of cells within that region. Regions containing the same number of cells may not touch each other horizontally or vertically. A region may contain none, one, or more than one of the given digits.





D. TENTJE-BOOMPJE (TENTS) (30 POINTS) Attach a tent to each tree, in a horizontally or vertically adjacent cell. Cells with tents do not touch each other, not even diagonally. Clues outside the grid indicate the number of tents in the corresponding row or column.

20. GEMINI LOOP

Draw a single closed loop through all cells of the grid, that travels horizontally or vertically and doesn't cross or overlap itself. Cells with equal letters are traversed in the same way, cells with different letters in different ways.





21. MAGIC SUMMER

Place the digits 1-5 exactly once in each row and column. Some cells remain empty. Horizontally and vertically connected digits form numbers, where two numbers are separated by at least one empty cell. Clues outside the grid indicate the sums of all numbers in the respective row or column.



	177	141	357	51		474	
78	3	2		1		4	5
60	5		З	4		2	1
267		5	4		2	1	3
240	1		2	3	5		4
96	4	1		5	3		2
276	2	3	1		4	5	
		4	5	2	1	3	

22. KORAAL (CORAL)

Blacken some cells to create a single connected group of cells (the coral), without enclosing any white cells. **No 2x2** area may be fully blackened. Clues outside the grid indicate the lengths of connected shaded cells in the corresponding row or column. Clues are given in increasing order and not necessarily in the order the blocks appear. There must be at least one white cell between two blocks of black cells.





23. PENTO REGIOS

Place one of the given pentominos in every bold outlined region. Pentominos may be rotated and/or mirrored, but don't touch each other, **not even diagonally**.







24. KAMERTJE VERHUREN (SLITHERLINK)

Draw a single closed loop into the grid by connecting the dots. The loop cannot touch itself, **not even diagonally**. The numbers in the cells indicate how many parts of the loop are directly beside, under or above the number.



25. LETTER WEIGHTS

Attach a different value from the given range to each of the given letters. Numbers behind words indicate the sum of the values of all the letters in that word.



