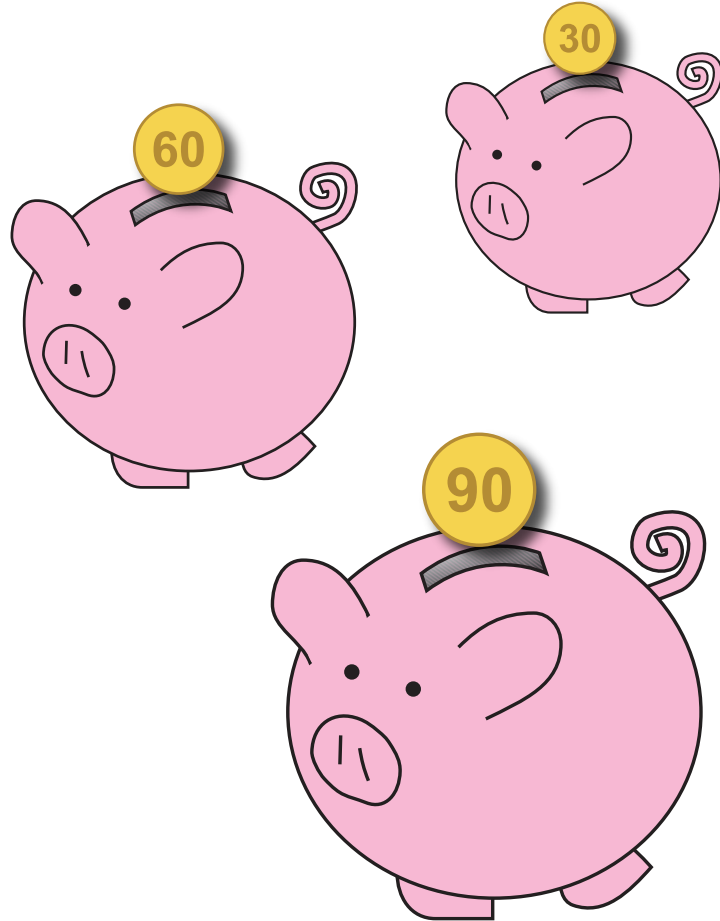


PUZZLE JACKPOT

8th-9th January 2011

120 minutes + 5 minutes extra time

Puzzles by: Serkan Yürekli



Thanks to Gülce Özkütük Yürekli for test-solving and logo design, Mehmet Murat Sevim for test-solving and LMI for hosting the contest.

Jackpot concept: The scoring of this contest will be different from usual contests. In usual contests, success depends on the individual's skills only. But in Puzzle Jackpot, the success of all participants is important in scoring.

The points for each puzzle will depend on the number of participants who solves that puzzle correctly. The more participants solve a specific puzzle, the less points that puzzle will have, based on a formula.

Estimated Solving Time (EST): Each puzzle is represented with an EST in order to give an idea for the difficulty of the puzzle. So the solvers can guess the probability, whether that puzzle will be solved by many competitors or a few. EST's are determined by the author, guessing the solving time of an average solver.

There are 3 categories of initial points(IP) for each puzzle, depending on the EST's. The final points will be calculated based on these IP's.

EST	IP
00:00 – 04:30	30 points
04:31 – 09:00	60 points
09:01 –	90 points

Scoring:

[IP – (number of participants who solved the puzzle correctly * 0,1)]

For example, a puzzle has 30 points (IP) and 100 competitors solved that puzzle correctly. So the final score of the puzzle will be $30 - 100 * 0,1 = 20$ points.

Results table will be updated with each submission, so the actual results will be known only after all entries are accepted. Competitors will not be able to view the current points before finishing the contest.

Timing: The contest will last 120 minutes + 5 minutes extra time. Delayed submissions will be penalized 8 points per minute.

Puzzle Types: There are 5 main categories of puzzles: Skyscrapers and variations, Snake and variations, Math puzzles, Tapa and variations, Word puzzles.

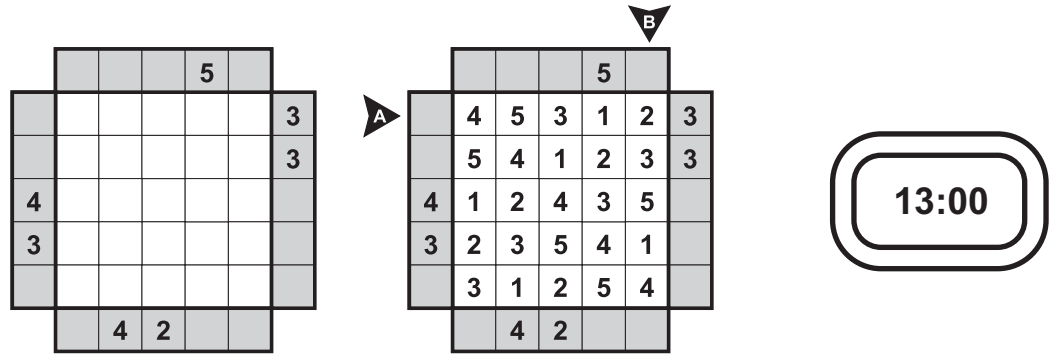
Notes

- **The puzzle file will not contain examples.**
 - **There will not be any types of bonuses.**
 - **Check the last page for practice puzzles.**
-

Answer format: Write the contents of the marked rows, followed by the content of the marked columns.

A- Skyscrapers

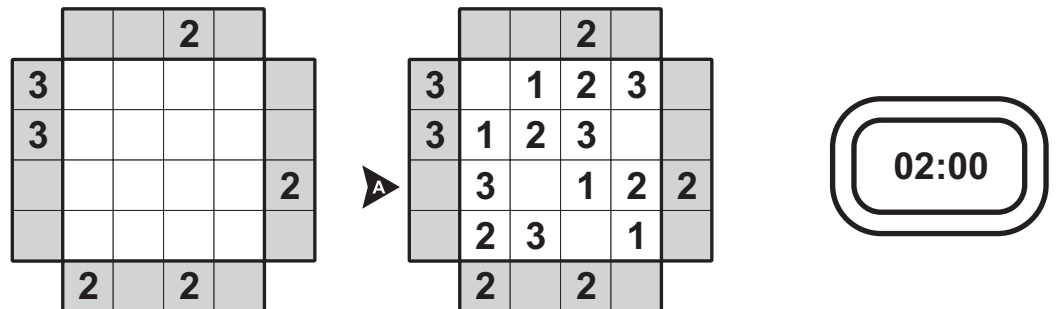
Fill in each cell of the grid with digits 1-7 (1-5 for the example), so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate the number of buildings that can be seen from the corresponding direction.



Answer for the example would be: 45312, 23514

A1. Gappy Skyscrapers

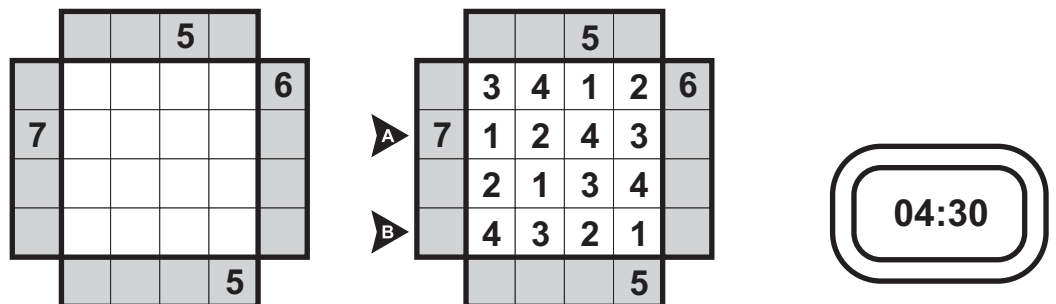
Fill the grid with digits 1-4 (1-3 for the example) so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate the number of buildings that can be seen from the corresponding direction. Exactly one cell will remain empty in each row and in each column.



Answer for the example would be: 312

A2. Sum Skyscrapers

Fill in each cell of the grid with digits 1-5 (1-4 for the example), so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate the sums of buildings that can be seen from the corresponding direction.



Answer for the example would be: 1243, 4321

A3. Skyscrapers Either/Or

Fill in each cell of the grid with digits 1-5 (1-4 for the example), so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate EITHER a) the number of buildings that can be seen from the corresponding direction, OR b) the height of the first visible building in that direction.

Answer for the example would be: 1432, 3142

A4. Domino Skyscrapers

Fill in each cell of the grid with digits 1-7, so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate the number of buildings that can be seen from the corresponding direction. All dominoes should have the same sum of digits.

Answer for the example would be: 3246715, 4562137

Answer format: Write the contents of the marked rows/columns. Use S for snake parts and E for empty cells.

B- Snake

Locate a 45 cell long (23 for the example) snake in the grid, whose head and tail are given, without touching itself even at a point. Numbers outside the grid indicate the amount of snake segments in the corresponding direction.

Answer for the example would be: SEEESS, SESSSS

B1. Snake Egg

Locate a snake in the grid, whose head and tail are given, that travels only horizontally and vertically, with touching itself only diagonally. The remaining cells should form seven separate areas (four for the example) with the sizes 1~7 each (1~4 for the example), and one more with an unknown size. Numbers in the grid indicate the size of the area including that cell.

Answer for the example would be: SESSS, ESSSSS

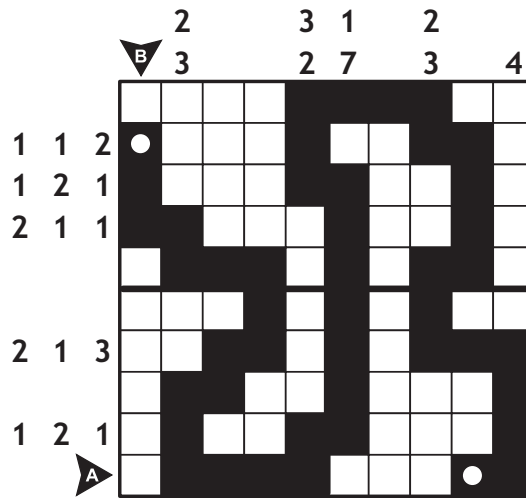
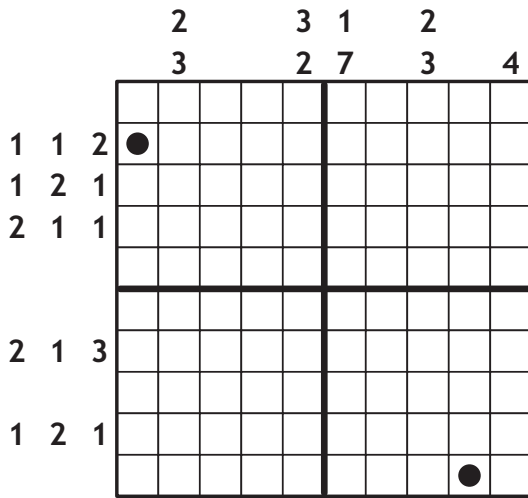
B2. Dotted Snake

Locate a 45 cell long snake in the grid, whose head and tail are given, without touching itself even at a point. Every third segment of the snake has a dot on itself. Numbers outside the grid indicate the amount of dots in the corresponding directions. The black cells are not a part of the snake.

Answer for the example would be: SESSS, EEEES

B3. Japanese Snake

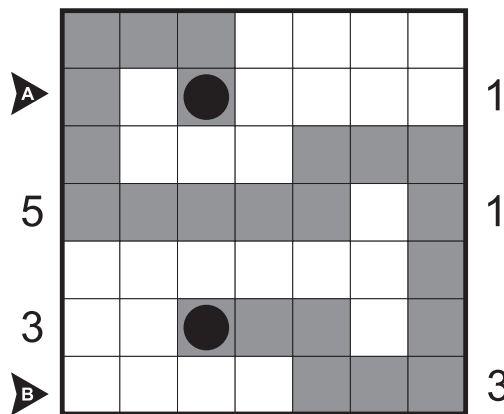
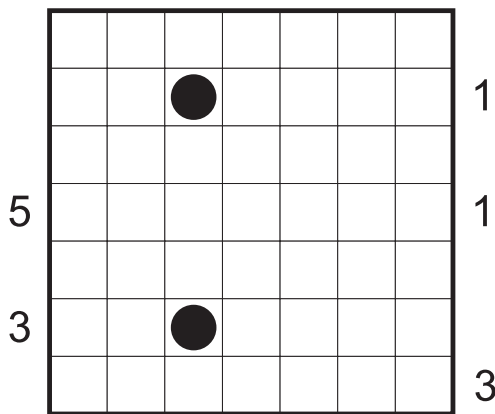
Locate a 45 cell long snake in the grid, whose head and tail are given, without touching itself even at a point. Numbers outside the grid indicate the length of snake segments in the corresponding direction, in order.



Answer for the example would be: ESSSSEEESS, ESSSSEEEEE

B4. First Seen Snake

Locate a 45 cell long (23 for the example) snake in the grid, whose head and tail are given, without touching itself even at a point. Numbers outside the grid indicate the length of snake segments seen first towards the corresponding direction.



Answer for the example would be: SESEEEEE, EEEESSS

Answer format: Write the contents of the marked rows/columns. Use E for empty cells in puzzles C1 and C2.

C- Kakuro

Enter a single digit from 1 to 9 into each of the empty cells so that the sum of numbers in each Across and Down answer equals the value given to the left or above, respectively. No digit may repeat within a single answer.

		11	29	14	22		
28							
27						16	8
8			14				
8				16			

		11	29	14	22		
28		5	8	6	9		
27		3	9	8	7	16	8
8		1	7	14	6	7	1
8		2	5	1	16	9	7

11:30

Answer for the example would be: 3987, 681

C1. Gapped Kakuro

Enter a single digit from 1 to 9 into each of the empty cells so that the sum of numbers in each Across and Down answer equals the value given to the left or above, respectively. No digit may repeat within a single answer. Some cells may remain empty, and empty cells cannot be adjacent.

			14	7	11	10	11	10
	30							
	21	16						
		31	5					
19					3			
10					13	17		
8				11				
7			4					
26								

			14	7	11	10	11	10	
	30		8	4	2	7	9		
	21	16	6	1		3	2	4	
	9	31	5		5				
19	8	9		2		3		3	
10	3	7			3	13	17		
8		8		6	11		4	6	1
7	1	6		4		1		3	
26		1		6		9	8	2	

11:00

Answer for the example would be: 61E324, 89E2EE3, 86EE

C2. Magic Summer

Fill the grid with digits from 1 to 4, so that each row and column contains each digit exactly once. Numbers outside the grid indicate the sum of all numbers appearing in corresponding rows and columns. These numbers are separated by at least one empty cell.

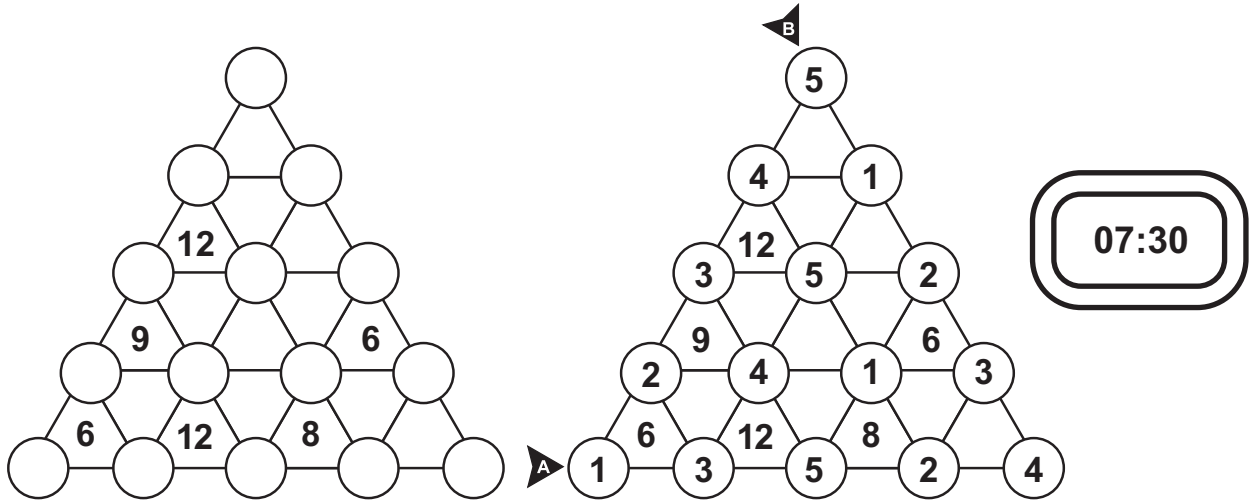
1		4		3	2
3	2		1	4	
	4	2	3		1
2		3		1	4
4	1		2		3
	3	1	4	2	

03:30

Answer for the example would be: 1E4E32, 41E2E3

C3. Trid

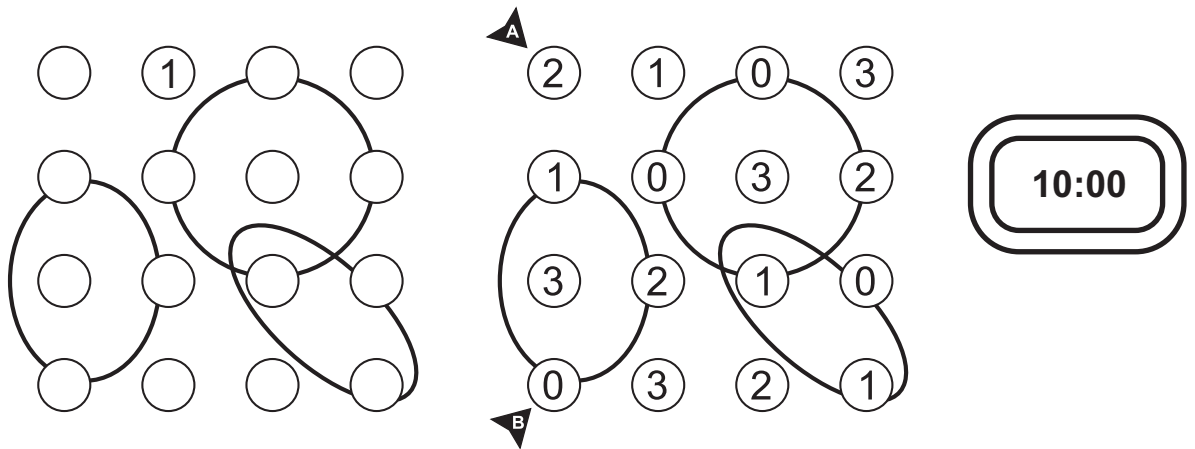
Place digits 1-7 (1-5 for the example) in each of the circles so that no digit is repeated within any straight line. Each number in a triangle equals to the sum of digits in the triangle's vertices.



Answer for the example would be: 13524, 51234

C4. Orbits

Write digits from 0 to 6 (0-3 for the example) into the circles. The digits cannot repeat in rows and columns. Digits in the circle-planets should be equal to the sum of digits in their satellites - circles lying at the orbit around the planet.



Answer for the example would be: 2011, 0233

Answer format: Write the contents of the marked rows/columns. Use E for empty cells and T for blackened cells. Use digits in puzzle D4.

D- Tapa

Paint some squares black to create a continuous wall. Number(s) in a square indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

2			1 ₃
	2 ₂		2

A	2			1 ₃
B				
		2 ₂		2



Answer for the example would be: ETTET, TETTT

D1. Knapp Daneben Tapa

Paint some cells black to create a continuous wall. Number(s) in a cell indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

All given numbers are wrong. The correct number is either 1 higher or 1 lower, meaning a 1 can possibly turn into a zero.

1			2 ₄
	3 ₃		1 ₃

A	2			1 ₃
B				
		2 ₂		2



Answer for the example would be: ETTET, TETTT

D2. Tapa ?

Replace each question mark with a nonzero digit and solve the puzzle. Paint some squares black to create a continuous wall. Number(s) in a square indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

1				??
	???		3 ₃	
	4			??

A	1				1 ₁
B			1 ₁	1 ₁	3 ₃
		4			1 ₁



Answer for the example would be: EETTETT, TEEEEET

D3. Easy As Tapa

Paint some squares black to create a continuous wall. Number(s) in a square indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

The numbers outside the grid indicate the clue cell first seen from the corresponding directions.

Answer for the example would be: EEETEEE, TTTETTT

D4. Tapa Filler

Create a continuous wall of digits; at most one digit per cell. Filled-in cells cannot form a 2x2 square or larger. Number(s) in a cell indicate all digits on its neighbouring cells; each digit appearing as many times as itself. In the case of identical-digit groups around a clue cell, groups cannot be edge-to-edge neighbours (e.g., the 2-2 clue on the example).

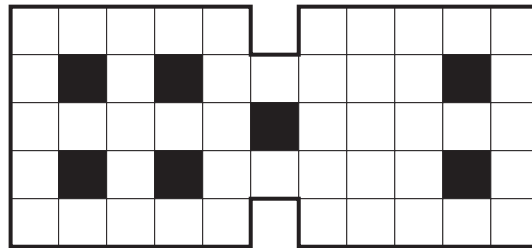
Answer for the example would be: E4EE33, EE2331

Answer format: Write the unused words in alphabetical order. Write the missing 16 letters in puzzle E1.

E- Crisscross

Enter 17 of the 20 given words in the grid to complete the crisscross pattern across and down.

- AKTAR ILICA
- ALAKA ISLAH
- ALARM ISMET
- AMADE KATAR
- ARTMA MALTA
- ASTAR MASAL
- ASTIM TAHTA
- ATAMA TAMAM
- EVRIM



Answer for the example would be: ASTIM, KATAR

E1. Missing Letters

The words listed below can be found in the word search grid. Each name reads in a straight line horizontally, vertically, or diagonally. The 16 central letters in the grid must be filled in before the puzzle can be completed.

- KASA
 - KATI
 - KITA
 - KUTU
 - KUZU
 - MAKAS
 - SAAT
 - SAKIZ
 - TAKAS
 - ZAMAN
- | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | N | A | M | A | Z | S | N | A | M | A | Z |
| U | S | A | K | S | S | U | S | A | K | S | S |
| A | S | | | A | T | A | S | A | K | A | T |
| U | T | | | A | S | U | T | U | K | A | S |
| I | Z | I | A | A | S | I | Z | I | A | A | S |
| U | Z | S | K | T | M | U | Z | S | K | T | M |

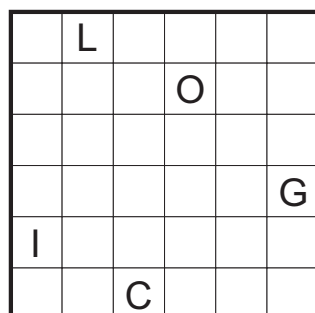


Answer for the example would be: AK, UK

E2. Scrabble

Enter 26 of the 28 given words into the grid crisscross-style (that is, words are completely interlocked and read from left to right or top to bottom, and there are no words of two or more letters in the completed grid other than the given words). Each given letter should be part of one word only.

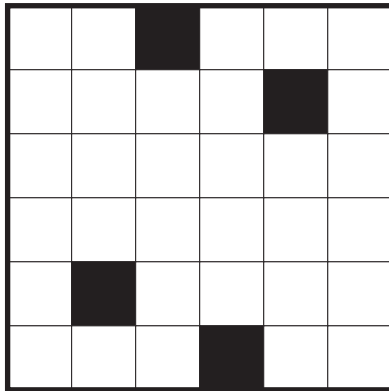
- ACEM
- ALET
- ATILIM
- GUR
- MECBUR
- MORG
- TORK



Answer for the example would be: ACEM, MORG

E3. Jumping Crossword

Place 44 of the 47 given words into the grid. The words may jump over some squares, even the first or the last ones, but never more than just one for one jump. The jumped squares are also jumped by the word coming across. The jumpings are not indicated in the listed words. Given numbers indicate the lengths of the words including the jumpings.



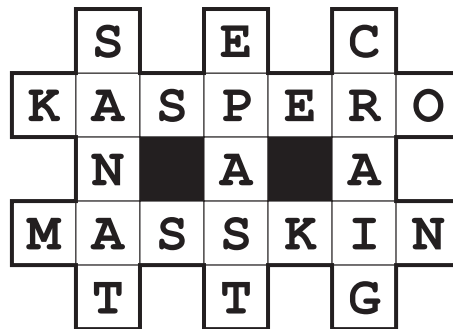
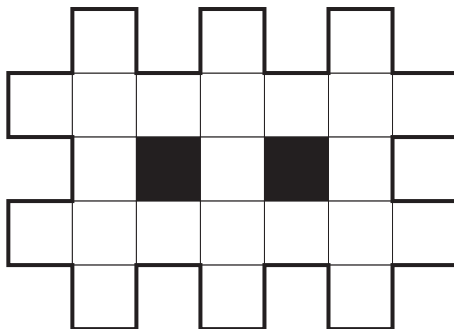
- 2: OL, P, TE
- 3: AZ, EK
- 4: KIT, MAT, PES, ZAR
- 5: ISIK, TEZ
- 6: ESER, ASIM, HAZIR, KARE, ZERRE

Answer for the example would be: HAZIR, OL

E4. Crisscross Crash

Enter 27 of the 29 given words in the crisscross diagram reading Across or Down, one letter in each cell. When two or more entries share a row or column, each must overlap the next by exactly one letter.

- EP
- RO
- MASS
- PAST
- SKIN
- SPAM
- CRAIG
- KASPER
- SANAT



Answer for the example would be: SPAM

Sources for practice

Skyscrapers and Variations

<http://www.hochhausigel.de/e-index.html>
<http://logic-masters.de/Meisterschaften/wettbewerb.php?id=6>
<http://logic-masters.de/Meisterschaften/wettbewerb.php?id=14>

Snake and Variations

<http://logic-masters.de/Meisterschaften/wettbewerb.php?id=15>

Math Puzzles

Gapped Kakuro
11th 24 HPC Part 4; <http://www.worldpuzzle.org/wpfforum/read.php?2,453>
<http://www.logic-masters.de/Raetselportal/Raetsel/zeigen.php?id=0000VI>
<http://www.logic-masters.de/Raetselportal/Raetsel/zeigen.php?id=0000VJ>
Magic Summer
11th 24 HPC Part 3; <http://www.worldpuzzle.org/wpfforum/read.php?2,453>
Trid
<http://oapc.wpc2009.org/archive.php?id=44>
Orbit
http://www.forsmarts.com/pdf/april2010_en.pdf

Tapa and Variations

Tapa
<http://logic-masters.de/Raetselportal/Raetsel/zeigen.php?id=0000JC>
<http://logic-masters.de/Raetselportal/Raetsel/zeigen.php?id=000018>
<http://www.puzzlepicnic.com/genre?tapa>
Akil Oyunlari Magazine page 28; <http://www.akiloyunlari.com/>
Knapp Danaben Tapa
<http://logic-masters.de/Raetselportal/Raetsel/zeigen.php?id=00002N>
<http://oapc.wpc2009.org/archive.php?id=52>
Tapa?
<http://oapc.wpc2009.org/archive.php?id=57>
Easy As Tapa
<http://oapc.wpc2009.org/archive.php?id=57>
Tapa Filler
<http://oapc.wpc2009.org/archive.php?id=56>

Word Puzzles

Crisscross
<http://wpc.puzzles.com/history/tests/2000qtest/qTest2000.pdf>
<http://wpc.puzzles.com/history/tests/qtest2k2/summary.htm>
<http://wpc.puzzles.com/history/tests/uspc03/summary.htm>
<http://wpc.puzzles.com/history/tests/g4/summary.htm>
Missing Letters
<http://wpc.puzzles.com/history/tests/2000qtest/qTest2000.pdf>
<http://wpc.puzzles.com/history/tests/qtest2k2/summary.htm>
<http://wpc.puzzles.com/history/tests/uspc03/summary.htm>
<http://wpc.puzzles.com/history/tests/g4/summary.htm>
<http://wpc.puzzles.com/history/tests/g5/summary.htm>
Scrabble
<http://wpc.puzzles.com/history/tests/qtest2k2/summary.htm>
Jumping Crossword
11th 24 HPC Part 12; <http://www.worldpuzzle.org/wpfforum/read.php?2,453>
9th 24 HPC Part Laszlo Mero
8th 24 HPC Part Laszlo Ozvalt; http://rejtveny.atw.hu/24HPC2007_PUZZLES.zip
8th 24 HPC Part Laszlo Mero; http://rejtveny.atw.hu/24HPC2007_PUZZLES.zip
Crisscross Crash
<http://wpc.puzzles.com/history/tests/g5/summary.htm>
11th 24 HPC Part 4; <http://www.worldpuzzle.org/wpfforum/read.php?2,453>