Unusual and Strange Puzzle Collection

Authors: Ivan Koswara, Anderson Wang

We are presented with a collection of logic puzzles. However, the genres are all very unusual and strange… or are they?

This puzzle heavily refers to USPC, or the US Puzzle Championships. All genre names here; in fact, there is a unique genre from each of 2009-2017 (and we picked only genres that appeared in one USPC, not counting practice tests that use past puzzles):

- 2009: Eminent D'OHmain
- 2010: Route
- 2011: Kaku Rogue
- 2012: Magic Order
- 2013: Bombardoku
- 2014: Geometric Distribution
- 2015: First Seen Snake
- 2016: Cave LITS
- 2017: Almost Yajilin

First, we need to get past the first hurdle of signing up for an account on the USPC website. (This will be necessary later, because we need to dig a lot of USPC data.) Now, we can access all of USPC resources, and in particular, the rules to the given puzzles. The complete solution along with partial walkthrough for each puzzle is presented below.

However, solving the logic puzzles are not enough. There are still the blanks beneath each puzzle. In USPC, because submitting the entire grid is infeasible, solvers are required to submit *answer keys*: a short-ish string that checks whether you have solved a puzzle correctly or not. (For example, in a Sudoku puzzle, the answer key might ask you to input the contents of two of the rows.)

All the given grids have the exact same dimensions as the corresponding USPC puzzles. This suggests using the same answer key extraction method (down to which rows are extracted) for each puzzle to obtain the required answer keys. Indeed, if we take the answer key from each puzzle (and inserting a comma between separate parts of an answer key, as required per the rules), the blanks match exactly with the answer key, one character per blank. All highlighted blanks contain digits; taking them and performing the transformations at the end of the line gives three letters per puzzle. Sorting by year gives "LOOK AT THIS YEAR'S PRACTICE TEST".

The practice test for this year (2018) has a puzzle, Hexagonal Star Search, that hasn't appeared in a past USPC contest. Solving this puzzle gives INTERSECT, but that's not the answer to this puzzle. (It, however, *is* the answer to the Hexagonal Star Search, and if you are an USPC participant that wants to practice using the practice test, you will indeed get credit for submitting INTERSECT there.)

Now, if we realize that the digit grid matches the dimensions of the Hexagonal Star Search, we can make a leap to conclude that our digit grid might be another instance of Hexagonal Star Search. But what are the words to find? The fact that it will contain a lot of digits suggests that the very same answer keys we obtained in the previous

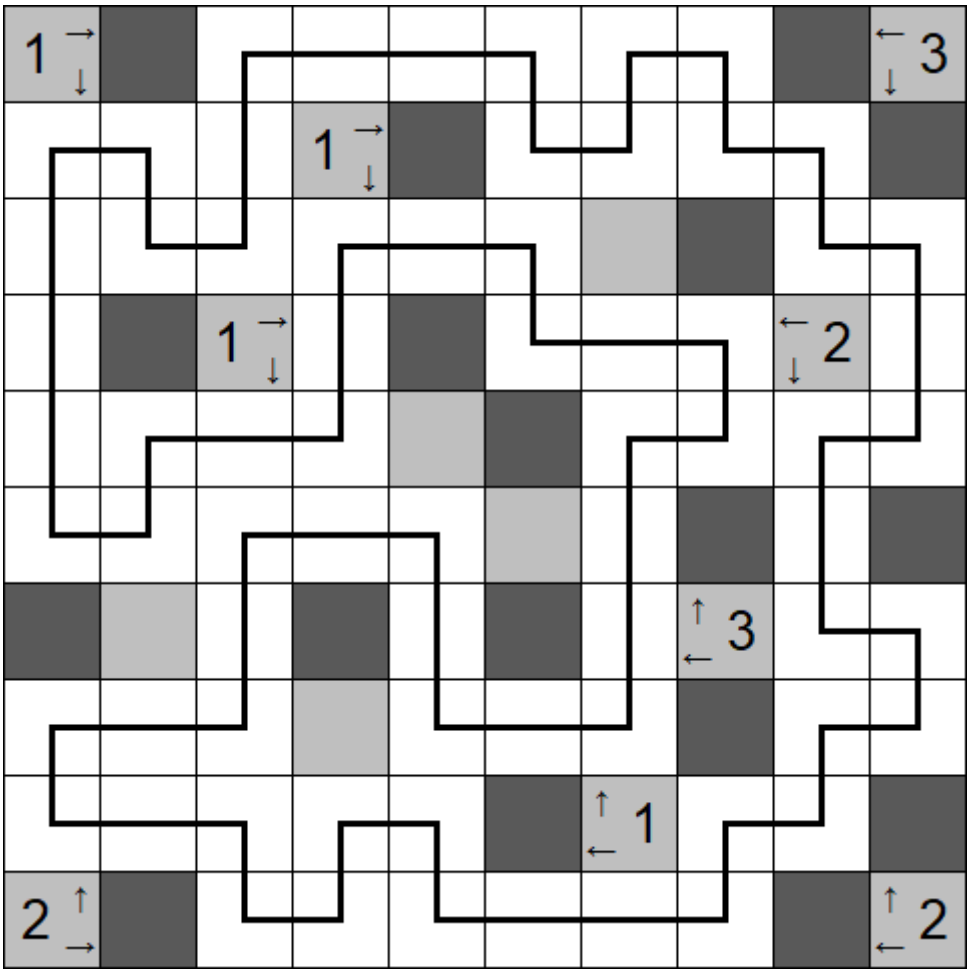
phase might be the words to find, and indeed we can find all the words in the grid. (Remember to remove all characters not found in the grid before searching, as given in the rules. In this case, remove the non-digits.) Doing this will yield stars that land on zeroes, but looking at the letter grid, the letters in the same positions spell out SAME YEARS. This is also *not* the answer.

"INTERSECT" and "SAME YEARS" are both part of the same clue phrase, "INTERSECT SAME YEARS". But what are "same years"? We might recognize that the word bank in the practice test looks like puzzle names ("maze", "Tapa"). In fact, they are also past USPC puzzles, also 2009-2017. Now "intersect" makes sense. We have two paths for each year (one from the practice test, the other from the digit grid); intersect them to obtain the letter. Sort by year to get **MCGRIDDLE**.

Year	Logic puzzle	Extraction	Answer key	Letters
2009	Eminent D'OHmain	Column numbers of empty cells from top to bottom	527391684	-15 +6 +11 L O O
2010	Route	Locations of clued numbers in path order	C3,G3,G8,C8,H4,D4,F5,A5	+3 -3 +15 K A T
2011	Kaku Rogue	Negated numbers from top to bottom	-8,-9,-1,-8,-2,-4,-9,-1,-1	+11 +0 +5 T H I
2012	Magic Order	Contents of 3rd row then 5th row	213564,365421	+6 +21 -16 S Y E
2013	Bombardoku	Contents of 1st row then 6th row, use x for bombs	23x4x0x1,xx23041x	-2 +18 -11 A R S
2014	Geometric Distribution	Contents of 3rd row then 6th row	255666,448888	-9 -26 -7 P R A
2015	First Seen Snake	Lengths of snake segments in 3rd, 6th, 10th rows	131,111,23	-10 +9 +7 C T I
2016	Cave LITS	Lengths of segments in loop in 2nd, 5th, 7th, 10th rows	1221,2121,211,10	+1 -7 -1 C E T
2017	Almost Yajilin	Lengths of loop segments in 2nd, 5th, 8th, 10th rows	111,211,221,13	+4 -3 +7 E S T

Year	Logic puzzle	Digit string	Word bank	Intersection
2009	Eminent D'OHmain	527391684	MAGIC PUZZLE'RS	M
2010	Route	33884455	RECTANGLE MAZE	C
2011	Kaku Rogue	891824911	HUNGARIAN TAPA	G
2012	Magic Order	213564365421	SPACE PROBES	R
2013	Bombardoku	2340123041	DIGI2RD SEARCH	I
2014	Geometric Distribution	255666448888	SUKAZU GAIDEN	D
2015	First Seen Snake	13111123	PINOCHLADA	D
2016	Cave LITS	1221212121110	OLYMPICS	L
2017	Almost Yajilin	11121122113	PENT-ACROSS	E

Almost Yajilin (2017)



111,211,221,13 → +4, -3, +7 → 5, 19, 20 → EST

This is actually not too different from normal Yajilin, as long as we keep track of the clues properly. A sequence of the important steps:

1. The outer border resolves to a count of black cells on each side. In particular, C10 has three black squares and only one way to resolve it.
2. From the 2 in R4C9, R10C9 must be black, finishing the bottom-right corner.
3. The 3 in R7C8 requires R7C1, R7C4, R7C6 to be black; no other way to get three black squares otherwise.
4. R1C8 and R5C8 are white, and not both of R2C8 and R4C8 are black. So R6C8 is black, and that makes R3C8 as well.
5. The 2 in R4C9 needs two pointing left. With many squares already white, R4C2 must be black for it to count right, and that resolves the top-left corner.
6. This forms a corner in R3C4, which means R4C4 is white and so R4C5 is black.
7. The ending requires parity arguments. The top half needs two more black squares, so the 1 in R2C4 points two right and so one down. That gives the clues needed to resolve both halves.

Bombardoku (2013)

2	3	x	4	x	0	x	1
x	1	x	0	4	3	x	2
4	x	3	x	1	2	x	0
x	0	1	2	x	x	4	3
1	4	0	x	3	x	2	x
x	x	2	3	0	4	1	x
3	x	x	x	2	1	0	4
0	2	4	1	x	x	3	x

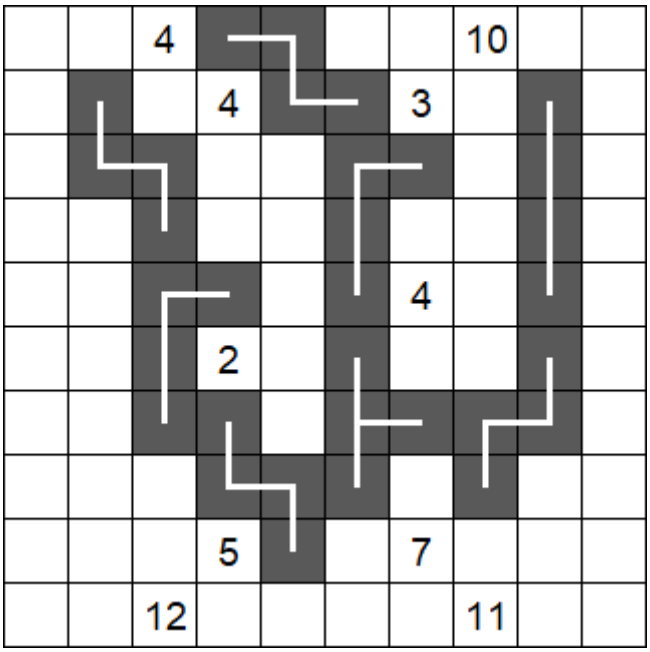
23x4x0x1,xx2304 1x → -2, +18, -11 → 1, 18, 19 → ARS

This doesn't actually have too many tricks in it, but the solve path is quite narrow:

1. R5-8C5-6 contains four squared cells. None of these can be 4, and there's only one location for the 3 (R5C5). The other three are 0, 1, 2.
2. R5-8C7-8 contains three squared cells, none of which is 4. The only location where it's possible to have a 3 is R5C7, but the row already has one, so there's no 3 either. The squared cells contain 0, 1, 2 too.
3. It's possible to resolve the squared cells in bottom-right quadrant: R5C7 is not 0 (mine in R5C6), R6C7 is not 0 (no place for 0 in the other box), so R7C7 and R6C5 are 0. Placing the 3 required mines in each box immediately gives all squared cells, and the nearby mines.
4. R6C4 has 2 mines surrounding it, but it's not squared, so it can't be 2. It must be 3, and R6C3 follows to be 2, placing several mines around.
5. Since R6C3 has the 2, the box in R1-4C3-4 must have a 2 in C4. Thus the box in R7-8C1-4 must have a 2 in C1-2. This can't be in R7 (R7C5 is 2), and not R8C1 (the count of mines is wrong, remembering R8 has all mines in bottom-right quadrant), so R8C2 is 2. Similarly, the 3 is also in C1-2; the only possible place is R7C1.

Those more or less describe all the tricks used in the puzzle. The rest of the puzzle is still narrow, but it uses pretty much the same kinds of deductions.

Cave LITS (2016)



1221,2121,211,10 → +1, -7, -1 → 3, 5, 20 → CET

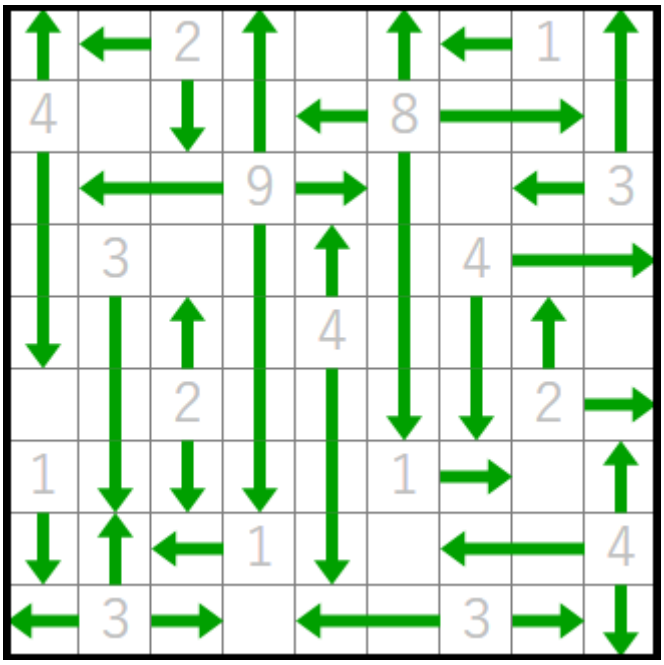
Call the part inside the loop white and the part outside the loop black.

Unlike in usual Cave, in this puzzle black cells are connected, and so both colors form connected regions. Another genre with this restriction is Black and White (also known as Yin Yang), and we can borrow a deduction from there; namely, in the outer border, all cells of a color are clumped together. We cannot have black-white-black-white circling the border; all the blacks must be together, and all the whites must be together.

This means the most important step of the puzzle is the beginning: the 4 in R1C3 can't see all the way to R1C8, and so there must be a black in R1C4-7. But R1C3 and R1C8 are both white, and so nearly the entire outer border becomes white.

The remaining steps are mostly standard Cave logic, but there are a few occasions where we need to remember the LITS part of the rules to proceed. A few times we need to avoid making a 2x2 black square, and near the end we need to invoke the rule "black cells must be partitioned into tetrominoes" twice (one near R1C4 and one near C2).

Eminent D'OHmain (2009)



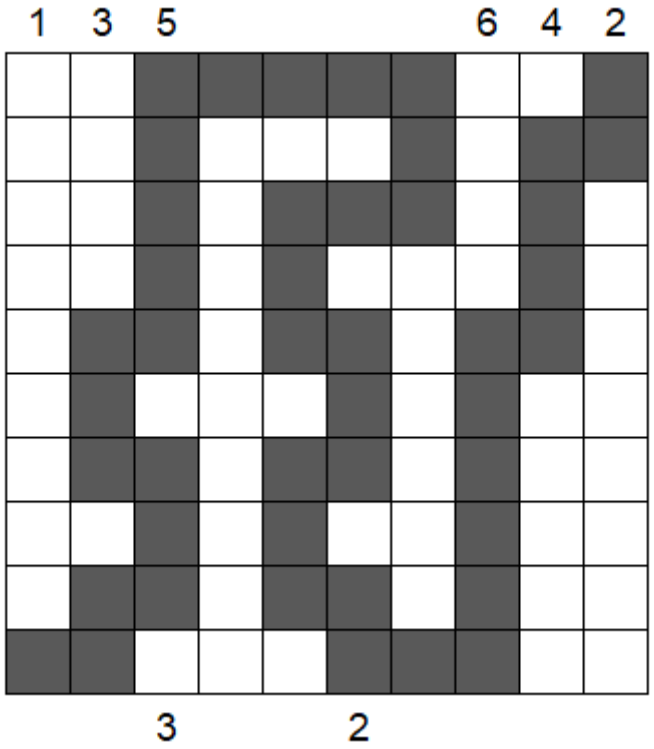
527391864 → -15, +6, +11 → 12, 15, 15 → LOO

A lot of this puzzle comes from small deductions, quite standard for Four Winds (otherwise known as Eminent Domain). But there's some Latin Square thrown in due to the blank squares condition.

1. The 8 in R2C6 can't fill the entire R2, so the 8 takes at most 6 cells horizontally. There's one cell up, still not enough, so it must go down to R3C6.
2. In turn, this blocks the 9 in R3C4 so much; it only has 10 cells to extend to.
3. The 4 in R2C1 must exit out the R1-2C1-3 quadrant (only 3 cells available there). So it must either go to R3C1 or R2C4, either way cutting the 9; only R3C1 leaves enough space for the 9.
4. With both R1C4 and R3C5 covered by the 9, there is now no way to reach R1C5. So it must be blank, making the rest of the row occupied.
5. The 8 must extend right to R2C7 (thanks to the 9 cutting it off on the left), and so only the 1 in R1C8 can reach R1C7. So this is the case; R1C9 is thus reached by the 3 in R3C9.
6. With the 3 occupying R2C9, the 8 is now full.
7. It's helpful to mark which squares are blank. R9C4 is blank (C4 is fully used); R8C6 is blank (C6 is fully used except for R8-9C6, but R9C6 can't be blank because of the row); R1C5 is blank and so the rest of C5 is filled.

The rest of the puzzle isn't too hard, using similar deductions as this. Solve the right part first, and the blank squares will dictate the blank squares for the left part.

First Seen Snake (2015)

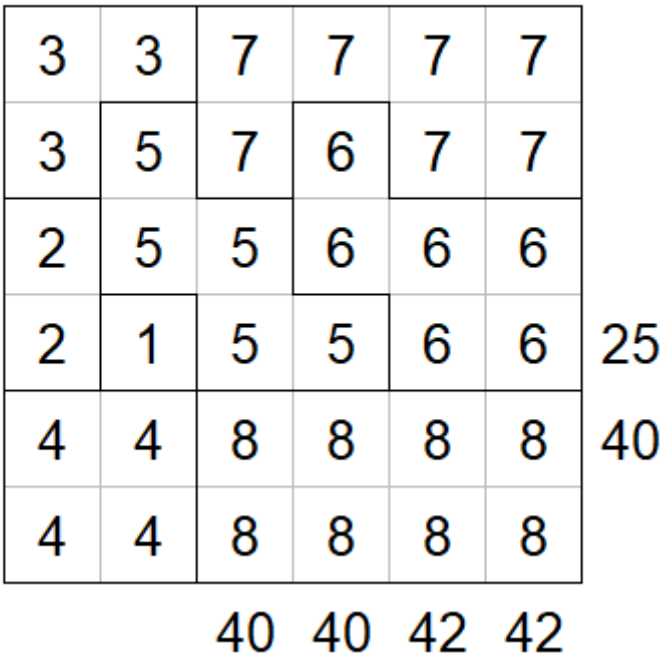


131,1111,23 → -10, +9, +7 → 3, 20, 9 → CTI

This puzzle rides on the fact that the snake is 45-cell long, and relies quite heavily on global logic.

1. C1-3 can actually be nearly solved. Column 3 is almost full, and Nonogram logic dictates several shaded squares. Then Column 2 tells us that the 3 seen must be in the middle (it includes R2C6-7), and now we obtain the rough path of how the snake looks like on the left.
2. C8-10 only has two solutions: pictured and its mirror image. So we also find the other end of the snake, and it's a matter of connecting them.
3. In both cases, C4 and C7 are full of unshaded squares. If the other end of the snake is on R10C10, both the left side and the right side of the board have their snakes open on the top row, and so it will look like an inverted U. This doesn't give enough shaded cells. So R1C10 is the other end of the snake, and we can resolve the right hand side.
4. Finally, parity issue resolves the left hand side (the other end must be R10C1, otherwise the snake's length is even), and we simply maximize the amount of cells the snake takes; turns out it covers exactly 45.

Geometric Distribution (2014)



255666,448888 → -9, -26, -7 → 16, 18, 1 → PRA

The first step is to realize that the sum of the four rightmost columns is 164. This is exactly the most we can get: putting eight 8s, seven 7s, six 6s, and three 5s (the rest of the cells) does add up to exactly 164.

The second step is to realize that Row 4 is actually very small. R4C3-6 are all at least 5, which contributes 20 already, so R4C1-2 cannot be 5 or more. In turn, this means R4C5-6 must be at least 6: either way, the 5 must extend to Column 2, and since there are only three 5s in the four rightmost columns, Column 6 must be free of 5s. But Column 5 is also free of 5s; if R4C3-5 are all 5, then those are all three 5s in C3-6, which means the 5 must extend to R4C2, impossible.

Finally, now Row 4 matches exactly: R4C3-4 are at least 5, R4C5-6 are at least 6, and R4C1-2 cannot be both 1. This means the row contains 1, 2, 5, 5, 6, 6; only the 1 and 2 can be flipped.

The converse happens in Row 5; it's very large. It in fact matches the maximum possible: R5C1-2 are at most 5, and R5C3-6 are at most 8, but the only way for R5C1-2 to have a 5 is if R5C3 is also a 5 (to connect downward), which gives a total of only 5+5+5+8+8+8 = 39, not enough. So Row 5 is exactly 4, 4, 8, 8, 8, 8.

Now the rest falls to place: the 4 occupies bottom-left corner, the 8 occupies bottom-right corner, the 5 extends up to R3C3 to R3C2, and the rest crumbles easily.

Kaku Rogue (2011)

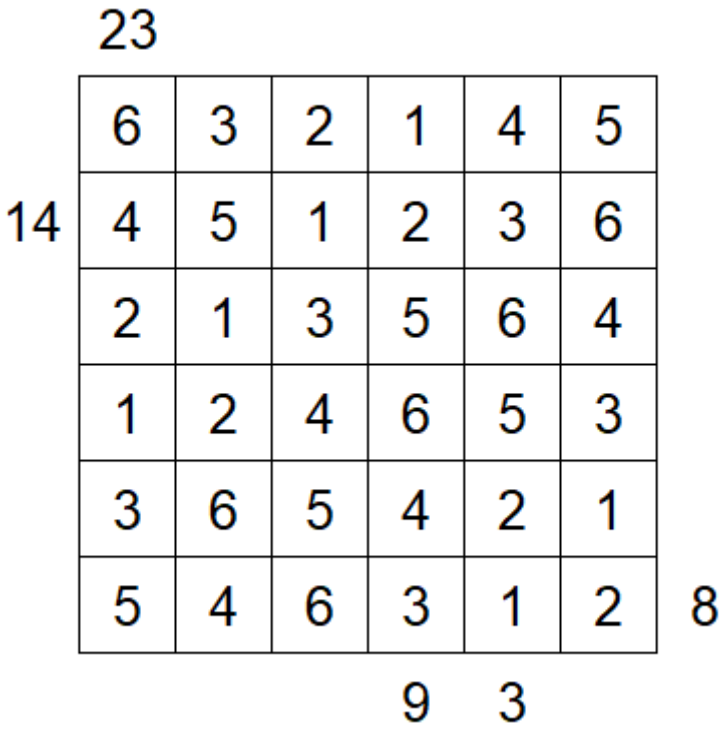
	12	5	29	4	-1		-3	19	21
31	9	8	7	3	4	7	-8	9	6
1	4	-9	3	1	2	7 / 12	1	4	2
7	-1	6	2	29 / 12	1	8	4	7	9
	34	12 / 17	9	6	-8	5	4 / 22	1	3
29	9	5	8	7	11 / 17	3	9	-2	1
6	4	2	19 / 7	8	9	-4	6	11	11
3	6	1	3	-9	2	10 / 5	1	2	7
13	8	6	-1	15	1	2	4	3	5
15	7	3	5	15	5	3	2	6	-1

-8, -9, -1, -8, -2, -4, -9, -1, -1 → +11, +0, +5 → 20, 8, 9 → THI

This is probably the hardest puzzle in the set. The intended solve path approximately go in order top-left, bottom-left, top-right, bottom-right:

1. Top-left: R2-3C1-2 have two negative signs; resolve R1C4 = 3, R3C5 = 1, then compare sums of across/down clues to obtain R4C5 = -8.
2. Bottom-left: standard max/min rules. R6C1 = 4 from its column being maximal and its row being minimal; R7C1 = 6 also follows. Then resolve the left portion of the center and finish by noticing the 13 is maximal and so it must be 8, 6, -1.
3. Top-right: R1C7 can't be -9, so the -3 is minimal: -8, 1, 4. Then compare sums again and use the fact that the two remaining cells of an across/down clue can't add up to 0; this forbids R3C6 being 7, or R5C6-7 adding up to 11. The rest of top-right can be solved with a very narrow path… or just solved by a program.
4. Bottom-right: R6C6 is exactly -4 (R5C6 is at least 3 from its row, R6C6 is at least -5 from its row). Then the 11 in C9 is maximal as 7, 5, -1, and the rest of the puzzle falls through.

Magic Order (2012)

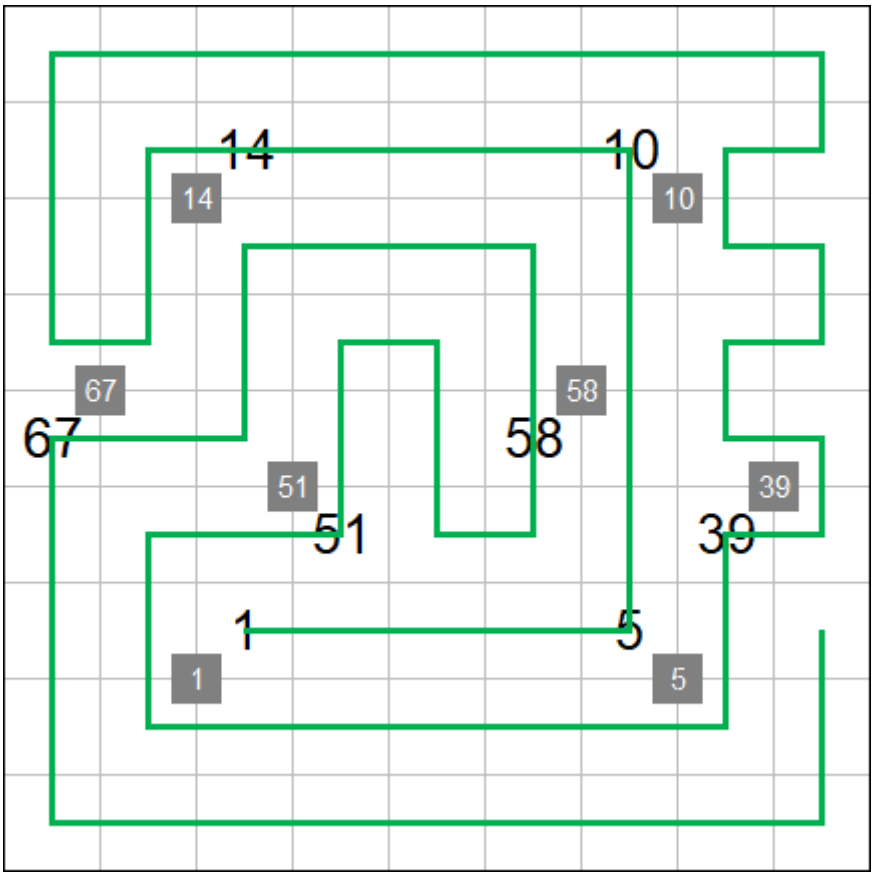


213564, 365421 → +6, +21, -16 → 19, 25, 5 → SYE

The first trick of Magic Order is, there are exactly four numbers beginning with each digit. Easy to see: from each side, there is one starting with each digit. This also means positions 1-4 begin with 1, positions 5-8 begin with 2, and so on. The solve starts there:

1. Filling that, we notice that 213… is the 8th number. So all numbers starting with 2 must begin with 213. This occurs in C6 (from bottom), but there are also two numbers starting with 2 from the left and from the top sides; the one from the left must be in R3, and the one from the top must therefore be C3.
2. R6 can be filled: the number must read 213645 from the right. So 6 is not in the fourth digit of any of the other 213… numbers, and we can locate R2C6 and R3C5 as 6.
3. C3 from below reads 645… or 654…, larger than 642… in C1 from top. So that's the larger number; the other numbers beginning with 6 are smaller; in particular, R1C2 is 3.
4. Completing some Latin squares, we get the locations of all 1s and 3s. Now R5C4 can't be 6 since that makes R5C2 not 6, and so C4 from bottom won't be the 9th number.
5. The numbers starting with 4 are pretty big; 46… at the bottom, and at least 43… from top and right. So R2C2 is 5 and not 2. Moreover, R1C6 is 5 and not 4, otherwise R1 from right is the same as R2 from left.
6. The rest is standard Latin square.

Route (2010)



C3,G3,G8,C8,H4,D4,F5,A5 → +3, -3, +15 → 11, 1, 20 → KAT

The most important observation in this genre is that with an odd-sized board, parity matters a whole lot. If we color the board in a checkerboard fashion, the path will always alternate colors. With an odd-sized board, one color has more squares than the other, and so that color must have the two endpoints. In other words, the color with more squares has the odds; the other has the evens.

The other important thing is that this genre has a lot of global, hand-wavy logic. A lot of "if this connects here, there's no way for that to connect there". It's a lot of intuition, not quite unlike the genre Numberlink (Arukone).

The solve path goes approximately as follows:

1. Place the 1, 5, 10, 14 by the parity observation and the fact that they are so widely separated.
2. Place the 39 from connecting to the 51; the path of 39 to 49 is completely fixed.
3. The bottom border is for 67 going up; the farthest we can do is to have 67 on R5C1 going to 81 on R7C9, and that's also exact.
4. The 14 occupies a few cells in top-left before going along the top border.
5. The middle is resolved easily. Place the 58 and it hugs the inner upper border to the 67, then there is only one way to fill the rest.

Author's Notes (+ bonus puzzles!)

A Brief History

The idea of this puzzle went through several stages, and in fact when we look back, this final puzzle has little resemblance to the original idea.

1. The very first idea was a copy of a 24HPC round but with new puzzles, and with some answer keys. The answer keys, applied to the new puzzles, would contain one half of the answer and an instruction to look at the original set; the answer keys, applied to the original puzzles, would give the other half of the answer.
2. 24HPC is too niche, though, and the most well-known puzzle competition, WPC itself, has puzzles behind a paywall. So we needed something else. Anderson suggested the idea of USPC.
3. USPC already has answer keys! What if we flipped the idea around? We gave new puzzles but without answer keys, and left people to realize that they should take answer keys from the original competitions and apply them here.
4. USPC has been going for several years, too, which means ordering by year is possible. And so we ended up picking 9 years and taking one puzzle from each year that will clue one letter of the answer.
5. I was happy with this, but Anderson wanted some kind of puzzle to tie the nine puzzles together. So we brainstormed and ended up with a word search puzzle (so that we didn't need particular restrictions on the answer keys – we actually made all puzzles before working on the word search grid).
6. Anderson had contact with Nick Baxter (USPC organizer). What if the instructions of this final puzzle were to be hidden in *this* year's USPC? Well, not USPC because it's in June, but in the practice test it's very possible, and so this was the result.

Choosing which genres to write was actually a lengthy process, partially because this was done while the skeleton of our idea wasn't set yet. During this time, I looked at USPC's instruction booklets like 10 times each, finding which genres would a) work for the puzzle (must contain digits in answer key), b) unique to their year (no Sudoku or Slitherlink), and c) I'd enjoy writing (no "find the differences"). And after we pinned down the final word search idea, condition a) turned into "has 9-12 digits in the answer key" to keep the lengths largely uniform. (At the end, this becomes 8-13.)

After assembling the lists, I picked one from each year, making sure that any basic genre is not repeated (there were Kaku Rogue (2011) and Kakuro with Pentominoes (2015); I went with Kaku Rogue), and there was as much variation as possible (you have several number placement puzzles, several shading puzzles, etc., instead of all of them being number placement).

I actually had 1-2 genres from each year, and I did write puzzles for both genres; the unused puzzles follow below. I didn't actually constrain myself during writing the puzzles; I didn't care about what the answer key would be, I just wrote to make neat-looking puzzles that were satisfying to solve. I wrote all nine of the logic puzzles.

The word searches, however, were a different matter. After getting all nine logic puzzles and gathering their answer keys, Anderson wrote the word searches in a "lazy"

manner: plug in the words arbitrarily as long as they fit, and fill the rest of the squares randomly and hope it didn't break. (I think it doesn't.)

Nick Baxter was actually involved a bit in the puzzle. Not only for the obvious reason of sending the letter grid so he could include it in the practice test, but he also testsolved this puzzle.

The years

2009: My choices were Eminent D'OHmain or Triangular Skyscrapers. But Triangular Skyscrapers had 16 digits, and when I tried to write one it went horrible anyway. So Eminent D'OHmain it was. My first draft ended up incredibly hard, because a planned logical step was lost after I tweaked the puzzle. It did still have a unique solution, but it was incredibly unfair that I practically redid the puzzle from scratch. (The opening was similar, but instead of a 9 you had a 8.)

2010: This was actually a terrible year; nearly no fitting one. (We tried to avoid using letters in answer keys, but we ended up doing so after other choices were even less appealing.) I wrote a puzzle for Hex Equation, but in this setting you could easily program to solve it. So Route it is. I started off by putting the 1, 5, 10, 14, and then I looked at how to make the rest interesting, which ended up having a lot of shortest/longest possible paths.

2011: The obvious top choice here was Kaku Rogue. There was Corral Crates, but the answer key was horrible, and we ended up having a Cave elsewhere anyway. As it turned out, this puzzle went insane and it's easily the hardest puzzle of the set.

2012: There are a lot of interesting genres here, but only Magic Order seemed to work well with the rest of the puzzle. (Multiplicative Corral is again Cave. Space Probes gives too few digits.) I don't remember how I got the "213… is 8th" idea, but it was definitely worth it, especially since I got away with less clues than the competition puzzle.

2013: Also a lot of interesting genres, and in fact Bombardoku was way down the list. The top choice was Tight Fit Tom-Tom, but it had too many digits. Thermo Skyscrapers was next, but my draft was pretty awful, and so I looked at other choices. I'd use Kakuro Cards, but I already have Kakuro (Kaku Rogue (2011)), so… Bombardoku it was. And it was a very good choice, since the layout of the final puzzle ended up really nice (nearly symmetric!), and the solve path was satisfying: hard but not unfair. I also wrote Pathfinder, which was a different kind of puzzle (counting!), but we scrapped it because it was too difficult to verify if you actually got the right answer or not.

2014: I wrote a Tapa View as well, but decided to go with Geometric Distribution because it was region division, something unusual in my list. Most of my list were number placements and shadings. The competition puzzle used minimization; what if I had maximization? And so the rightmost columns were born; the row clues were taken from forcing the 5 to have a logical solution.

2015: There are an *immense* number of genres I would have picked, if not for answer key restrictions. Character Development was interesting, but since I'd drop letters the answer would just be "12345…". Butterfly Effect was nice but hard to construct, and it

would repeat "Cihan Altay's region division to 1-8" puzzle like Geometric Distribution. Pinochlada was also interesting, but again the answer keys were letters. Nurikabe Loop might have been good, but it had a really large grid and so likely long answer key. We ended up with First Seen Snake or Kakuro with Pentominoes; I actually wrote a puzzle for Kakuro with Pentominoes, but it's not used because of Kaku Rogue (2011). Why are there so many interesting Kakuro variants in USPC? As for First Seen Snake, I began by putting the 1-3-5 and 6-4-2, and realized that this was nearly a puzzle already. And by pure luck, I could maximize the cells covered to hit exactly 45, so that's also what happened in the final puzzle.

2016: My other puzzle was Panoramic Skyscrapers, but that one was quite boring. I actually had to ask Anderson for a bit of hint while trying the original Cave LITS, but once I got the break-in, I realized this would make a far more interesting puzzle. It was interesting… if you didn't know the competition puzzle. If you knew, it wasn't that much since it copied a lot of tricks. I didn't even use the "no two same tetrominoes touch" rule.

2017: The "almost" puzzles here were pretty nice, and their unique names meant they could be googled pretty easily. I had options of Almost Yajilin or Almost Tapa (I considered Almost Fillomino but it had many digits.) I went with Almost Yajilin to add a loop puzzle (instead of another shading puzzle); I was about to write Almost Tapa too, but we finalized the nine logic puzzles then and I ended up not doing it.

2018: Picking the right final puzzle was also a hard task. We definitely wanted some kind of word search, since it's the easiest way to unify a bunch of answer keys, but a simple word search isn't appealing. We thought about Snaky Search (WPC 2017), but it felt too difficult to construct (I heard the competition puzzle broke). Then while I looked at past USPCs, I stumbled on Star Search (USPC 2011 practice), and thought this would be ideal. Giving how the stars worked was an easy choice, to allow more unique star methods; the obvious ones were already used in 2011.

Hunt post-mortem

We have a list of submissions to USPC, complete with timings from when a team got INTERSECT/SAMEYEARS and tried to submit those, to the eventual solve. Check this Google Sheets.

From the submissions, most people submitted INTERSECT and/or SAMEYEARS before submitting MCGRIDDLE. This allows us to somewhat keep track of people's progress (by seeing which submissions have been made, and that's also the inspiration of the Sheets above), but this also means people make wrong answers, which might not be very desirable. We should probably clue better that they are instructions.

In fact, the earlier instruction "LOOK AT THIS YEAR'S PRACTICE TEST" is actually not very clear either. People didn't expect they should solve the puzzle on the practice test as well, and some people got stuck at having only SAMEYEARS, completely missing INTERSECT. (There were several submissions that say OBAMA, as well as various puzzle types; we suspect they come from this.) We should have made a better

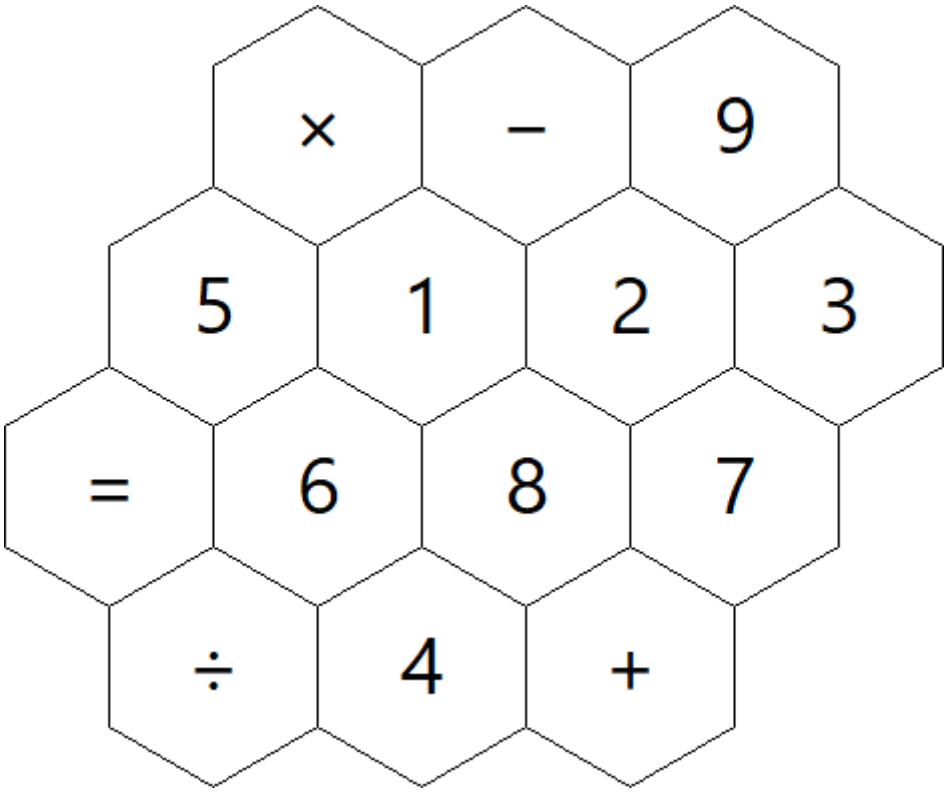
instruction to imply that the Hexagonal Star Search on the practice test was to be solved.

Alternately, we could have dropped the last step; instead, we could have only asked people to solve the digit Hexagonal Star Search, and index the stars to the practice test's grid (the method to get SAMEYEARS), to obtain the answer. But testsolvers appreciated the combination at the end, and so we didn't think about that. One thing for sure, though, is that simply cutting the puzzle at the first instruction (replacing "LOOK AT THIS YEAR'S PRACTICE TEST" with simply the answer) isn't very good; that would make the puzzles too disjoint.

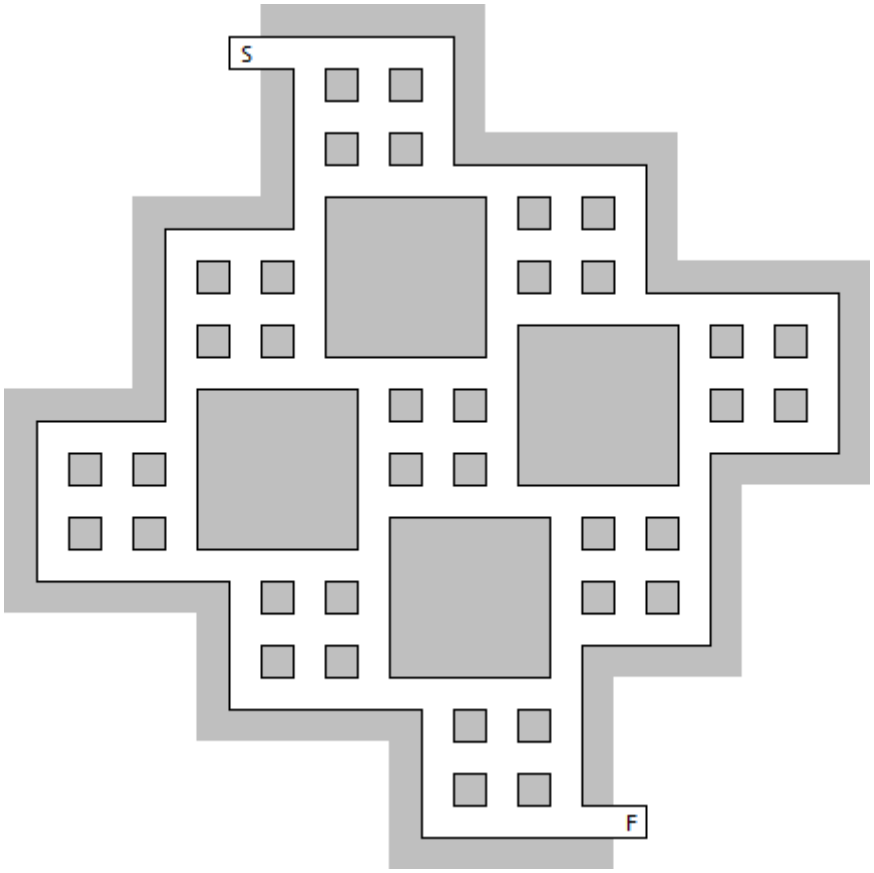
Oh, and we could have chosen some other site to pick puzzles to avoid registrations on other sites. Logic Masters India, anyone?

Bonus puzzles (aka unused puzzles)

Hex Equation (2010)



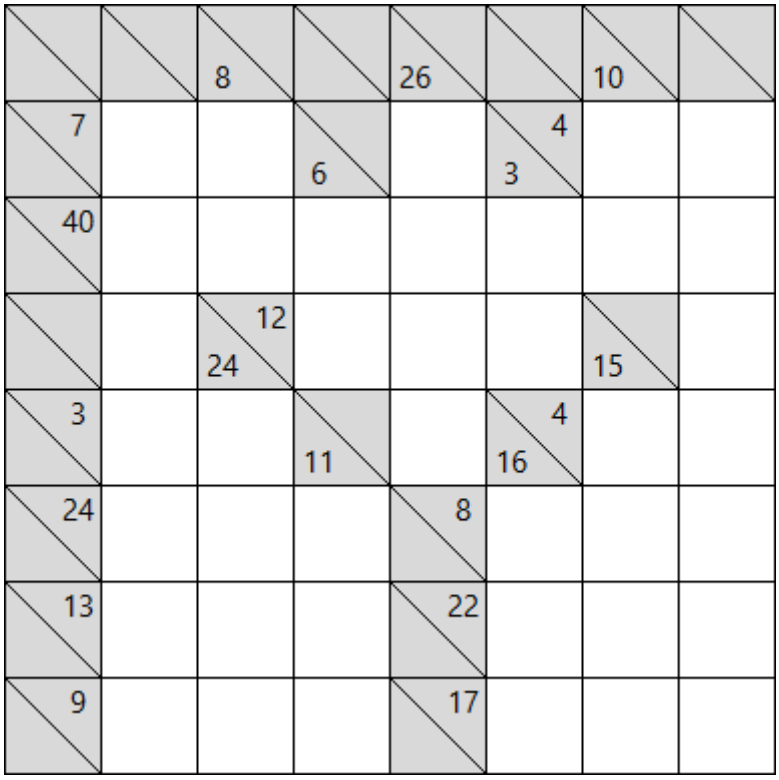
Pathfinder (2013)



Tapa View (2014)

5				4					
						4			
		1							
			2					4	
4				3					
					4				8
	4					5			
							6		
			4						
					3				4

Kakuro with Pentominoes (2015)



Panoramic Skyscrapers (2016)

(All clues span two rows/columns)