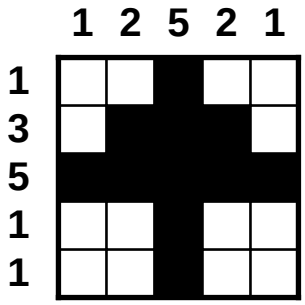
Nonograms

A fun way to keep your brain sharp

A friendly guide to picture-logic puzzles

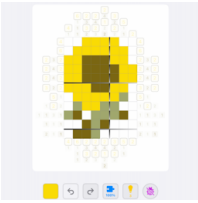


Shade the right squares and a hidden picture appears. There is no guessing, no math beyond counting, and no hurry. All you need is a pencil, a little patience, and the pleasure of working something out.

> In a study of more than 19,000 adults aged 50 and over, the more regularly people did puzzles such as crosswords and Sudoku, "the sharper their performance is across a range of tasks assessing memory, attention and reasoning."

Dr Anne Corbett, University of Exeter Medical School, who led the research (University of Exeter and King's College London study, International Journal of Geriatric Psychiatry, 2019).

Inside: how to read the numbers, nine short lessons, four puzzles with answers, and where to find more.

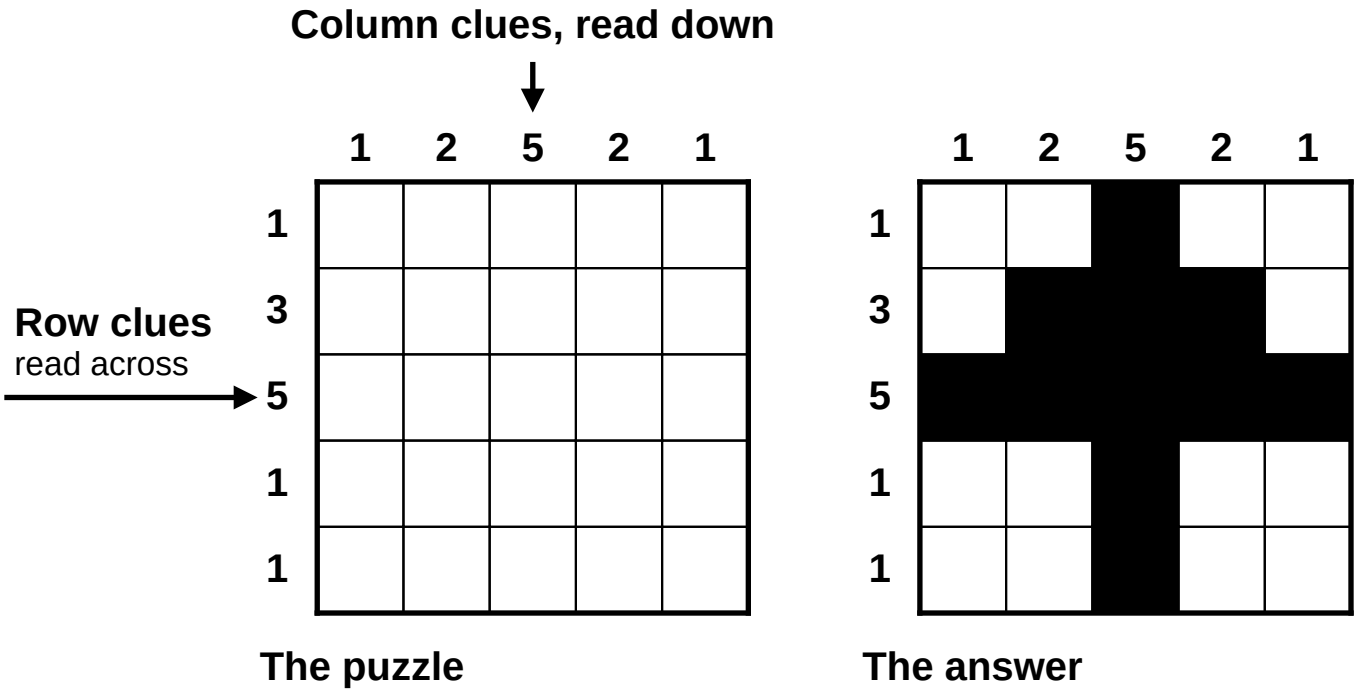


Search for LogiSketch on the App Store

What is a nonogram?

A nonogram is a picture puzzle on a grid. The numbers beside each row and above each column tell you which squares to shade. Shade the right ones and a hidden picture appears.

Here is a tiny one. The puzzle is on the left and its answer is on the right.



The numbers on the left are the **row clues**. Read them across. The numbers above are the **column clues**. Read them down.

Every nonogram can be solved by reasoning alone. You never need to guess and there is nothing to memorize. Every square has a reason, and the lessons in this guide show you the reasons, one at a time.

Reading the numbers

Each number is a block of shaded squares, side by side, in that row or column. Take the clue **2 1**. It means one block of 2 shaded squares and, later in the line, one block of 1. Between the blocks there is at least one empty square, and the blocks come in the order the numbers are written.

Here is an empty row of 5 squares, with its clue on the left:

2 1 

The clue 2 1 fits this row three ways. Gray shows each possible fit:

Fits 

Fits 

Fits 

These do not fit. The first has a block of 3. The second has its blocks in the wrong order:

Wrong 

Wrong 

But how do you know which of the 3 possible fits is the right one? The rest of this guide will show you how to logically find the only one that works with the rest of the puzzle.

Marking the Puzzle

- **Shade** a square you know belongs to the picture.
- Put an **X** in a square you know is empty. It saves you wondering about it later.
- Leave a square **blank** while you are still unsure. Blank means not decided yet.

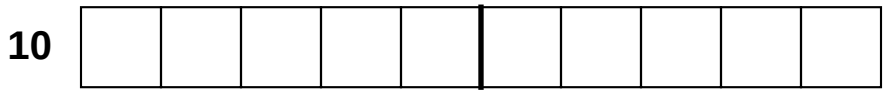
Work in pencil and keep a good eraser close by.

Lesson 1: Lines that give themselves away

Start with the easy lines. Two kinds are worth looking for.

A row or column that is completely full. Add up the numbers, then add one empty square for each gap between blocks. If the total is the length of the line, the blocks fit in only one way.

This row has the clue 10 and 10 squares.



The clues (with required spaces) sum to the available space: 10 = 10



A line that is finished. Once all the shaded squares a line needs are in place, every other square in it must be empty. Put an X in each one.

This row needs 2 shaded squares in all, and it already has them.



The clue (2) needs 2 filled cells in all, and 2 are already filled, so every other cell must be empty

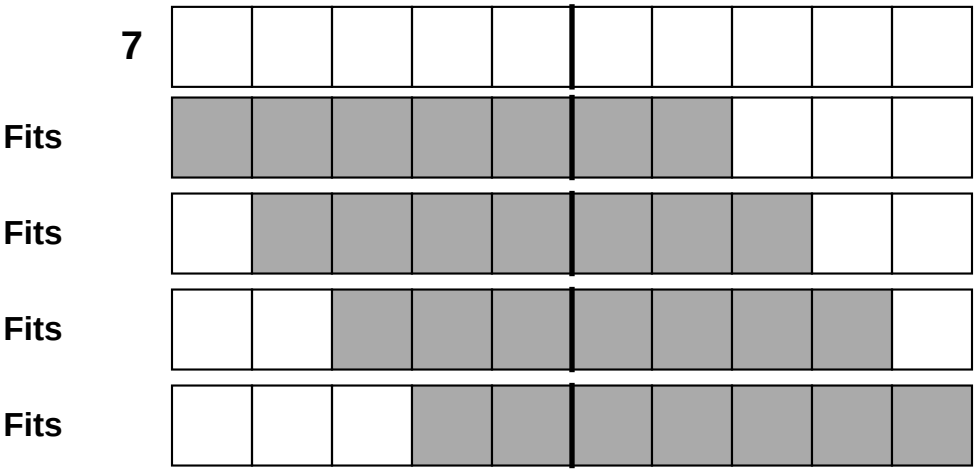


Black squares are shaded. A square with an X is empty. The small triangles point at the squares just worked out.

Lesson 2: A long block overlaps itself

A long block has little room to move. List every place it could sit, one fit at a time. Any square that is gray in every fit is covered wherever the block really sits, so it must be shaded.

The clue is 7 and the row has 10 squares, so the block can slide only 3 places. Here are all the fits:



The clues need at least 7 of the 10 cells, so each can shift at most 3; the clue 7 is longer than that, so 4 of its cells are covered wherever it sits



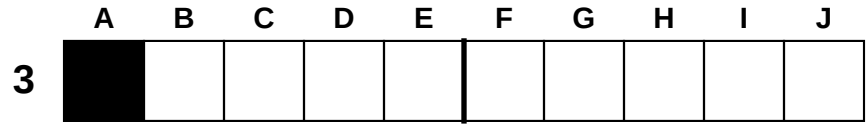
The longer the block is compared with the line, the more squares you can shade. If the block is no longer than the spare room, nothing is certain yet. Try another line.

Gray squares show a possible fit. Black squares are shaded for certain. A square with an X is empty. The small triangles point at the squares just worked out.

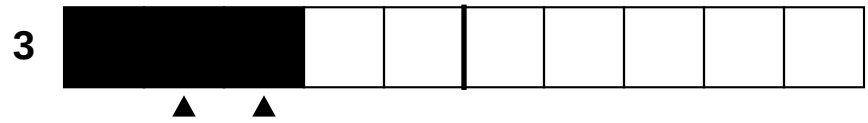
Lesson 3: Blocks that touch the edge

The edge of the grid is a wall. A shaded square at the edge, or close to it, pins down the block it belongs to, because the block cannot hang over the edge.

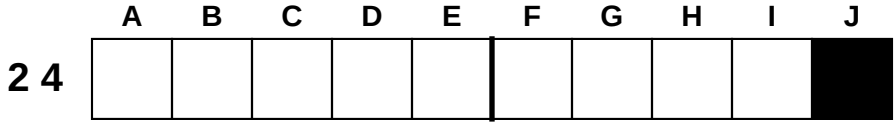
The clue is 3. The first square is already shaded.



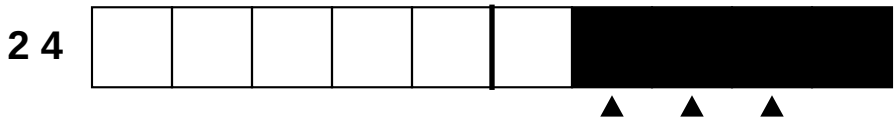
The filled cell at column A belongs to the clue 3, which can't start before column A, so it always covers columns A-C



The clue is 2 4. The last square is already shaded.



The filled cell at column J belongs to clue #2 (4), which can't end after column J, so it always covers columns G-J



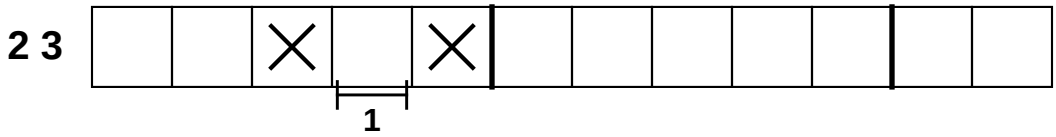
Look along the edges of the grid first. X marks and shaded squares there pin blocks down, and that unlocks the lines that cross them.

Black squares are shaded. A square with an X is empty. The small triangles point at the squares just worked out.

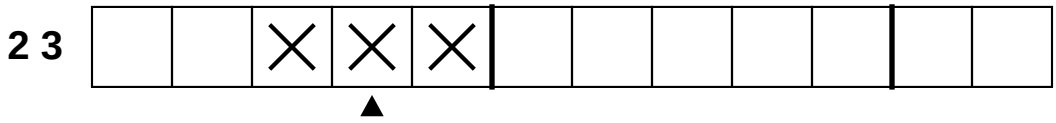
Lesson 4: Gaps that are too small

Look at the stretches of open squares between X marks. If a stretch is shorter than the smallest block in the line, no block can ever sit there. Put an X in it.

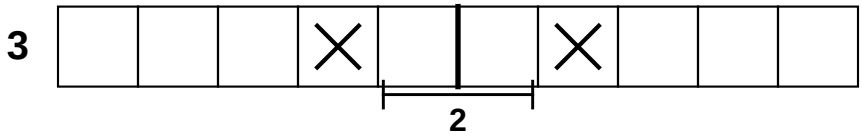
The clue is 2 3. Two squares are already marked X.



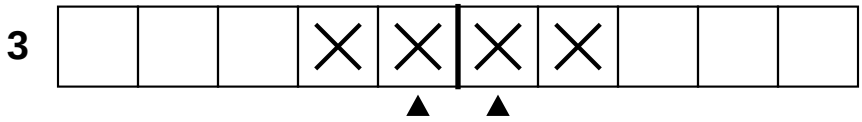
Even the smallest clue (2) is larger than this gap (1), so it must all be X-marks



Here is another row. The clue is 3. Two squares are already marked X.



Even the smallest clue (3) is larger than this gap (2), so it must all be X-marks



Black squares are shaded. A square with an X is empty. The small triangles point at the squares just worked out.

Lesson 5: Only one gap fits

When a block is too big for every stretch but one, it has to go in the one stretch that is big enough. If the stretch is exactly the size of the block, shade all of it.

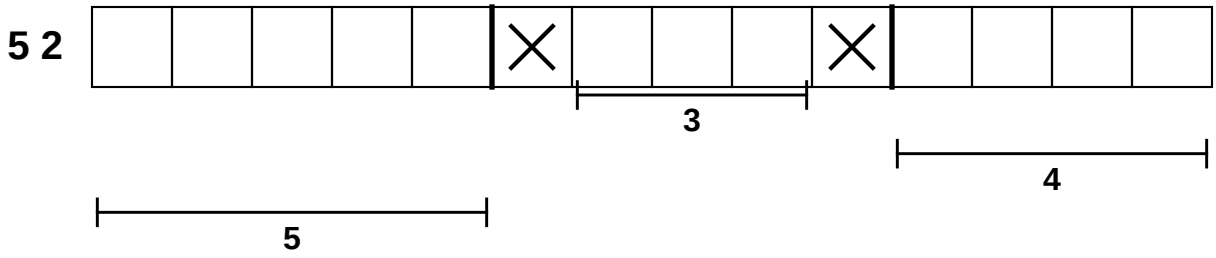
The clue is 8. The brackets show the stretches open to it.



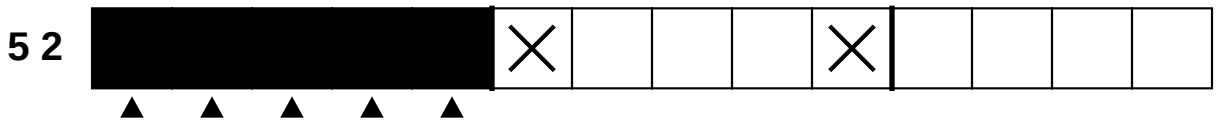
The clue 8 doesn't fit in any of this row's other gaps (shown), so it must go in the one gap left (8)



Here is another row. The clue is 5 2. The brackets show the stretches open to it.



Clue #1 (5) doesn't fit in any of this row's other gaps (shown), so it must go in the one gap left (5)

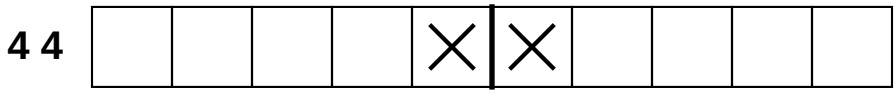


Black squares are shaded. A square with an X is empty. The small triangles point at the squares just worked out.

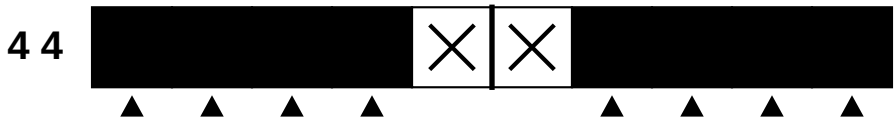
Lesson 6: Only one way to fit

Sometimes the squares you already know leave just one place for every block. Then the whole line can be filled in.

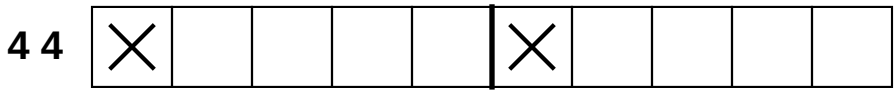
The clues are 4 4. Two squares are already marked X.



With the cells already known, clues 4, 4 fit this row in only one way, so these cells follow



Here is another row. The clues are 4 4. Two squares are already marked X.



With the cells already known, clues 4, 4 fit this row in only one way, so these cells follow



Black squares are shaded. A square with an X is empty. The small triangles point at the squares just worked out.

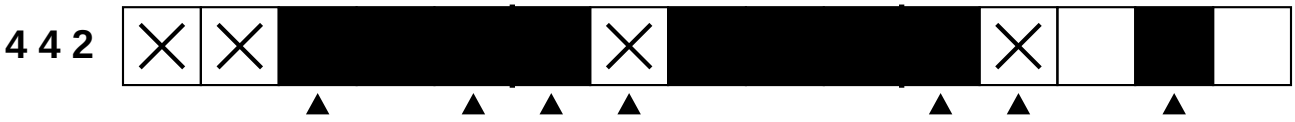
Lesson 7: Every arrangement agrees

When the blocks can still sit in more than one way, write the ways out, one fit at a time. Any square that is the same in every fit is certain. This takes patience, so save it for when the easier lessons have run out.

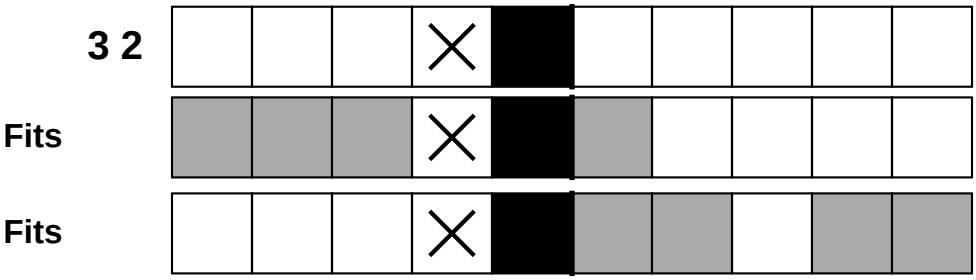
The clues are 4 4 2. Only 2 fits are left.



Clues 4, 4, 2 can be arranged 2 ways with the cells already known, and all 2 agree on these cells



Here is another row. The clues are 3 2. Only 2 fits are left.



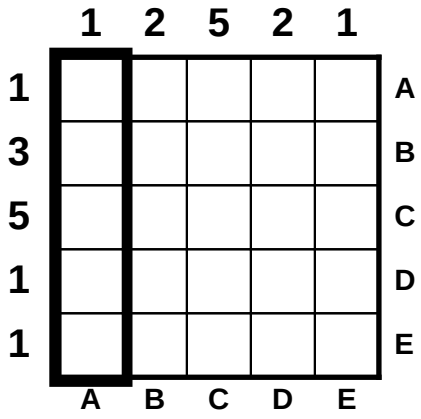
Clues 3, 2 can be arranged 2 ways with the cells already known, and all 2 agree on these cells



Gray squares show a possible fit. Black squares are shaded for certain. A square with an X is empty. The small triangles point at the squares just worked out.

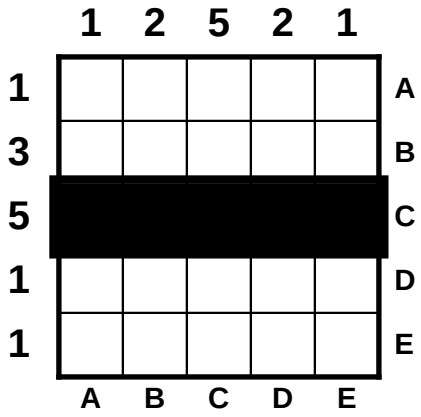
Lesson 8: Back and forth

Some rows and columns cannot be solved at first. Their turn comes later, once a line that crosses them has been worked out. Here is the tiny tree from page 2 again.



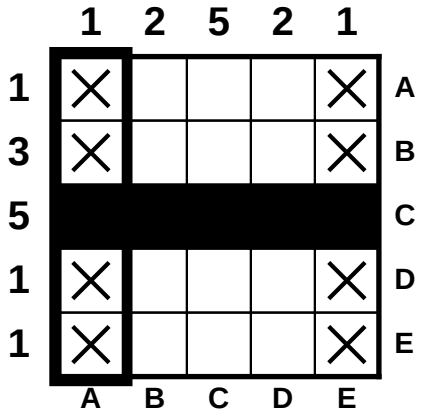
Look at column A. Its clue is 1.

The clue 1 is one shaded square, and with nothing else known it could be any of the 5. Nothing can be marked in column A yet, so leave it and look elsewhere.



Row C has the clue 5.

The clues (with required spaces) sum to the available space: 5 = 5

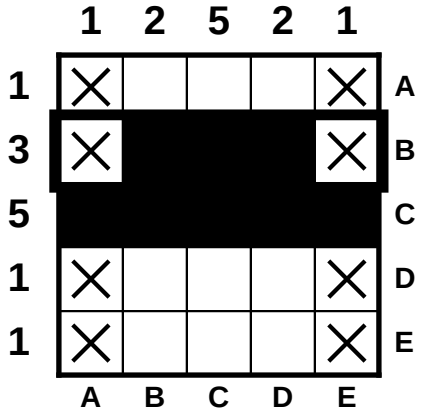


Back to column A. Row C is now filled.

The clue (1) needs 1 filled cell in all, and 1 is already filled, so every other cell must be empty

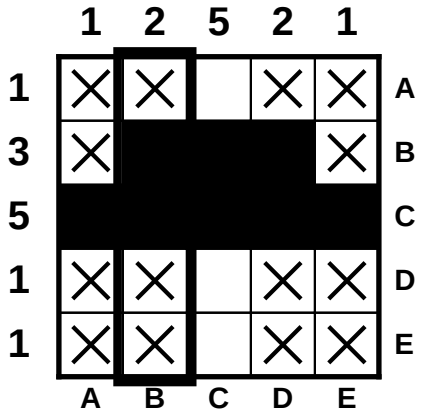
Column E has the same clue and the same filled square, so it works the same way.

Lesson 8: Back and forth (continued)



Now row B has a chance.

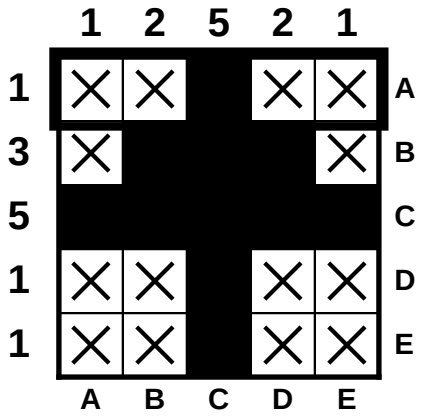
The clue 3 has only columns B-D to sit in, exactly its own length, so all of it is filled



Now columns B and D have a chance.

The clue (2) needs 2 filled cells in all, and 2 are already filled, so every other cell must be empty

Column D has the same clue and the same filled squares, so it works the same way.



Rows A, D and E can finish the picture.

The clue 1 has only column C to sit in, exactly its own length, so all of it is filled

Rows D and E have the same clue and the same single square left, so they work the same way.

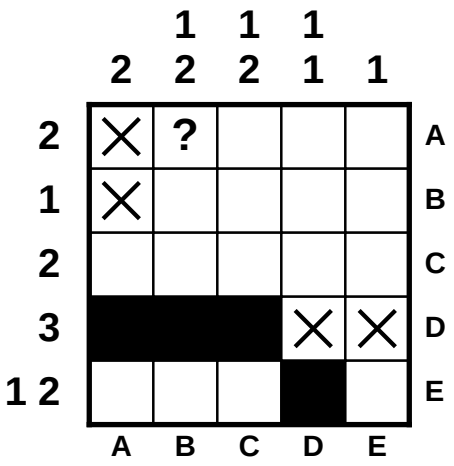
Keep going back and forth, rows then columns, looking for any row or column you can solve at the moment. Each time you fill something in, it opens up an opportunity in the other direction.

Lesson 9: What if?

Now and then every easier lesson has run dry. Then you can ask, "what if this square is empty?", and follow the consequences using the same lessons. If a line cannot possibly work, the idea was wrong, and the opposite is true. That is a proof, not a guess.

On paper, players keep an idea apart from what they know for sure with small marks, so a tiny dot or a tiny slash can never be mistaken for a shaded or crossed-out square. All of the small marks can be erased in one go. This guide does the same:

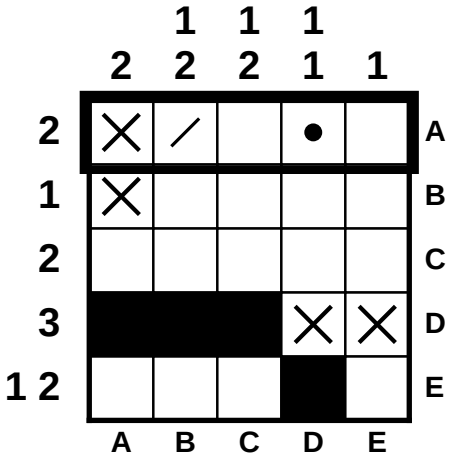
- A black square is certain.
- A bold X is certain: the square is empty.
- A small dot is an idea: pretend the square is shaded.
- A small slash is an idea: pretend the square is empty.



Stuck: no more certain squares. We test the square marked ?

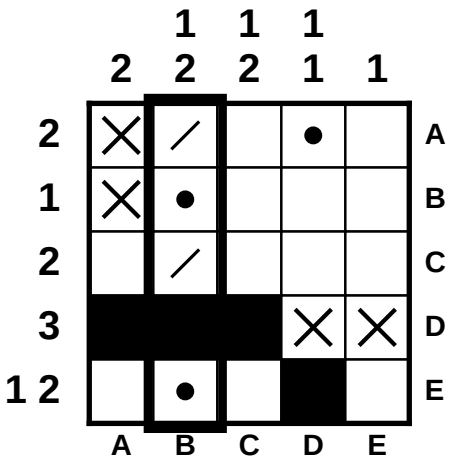
What if this is empty? Testing whether that leads to an impossibility.

Lesson 9: What if? (continued)



Pretend the tested square is empty and mark it with a small slash. Follow it along row A.

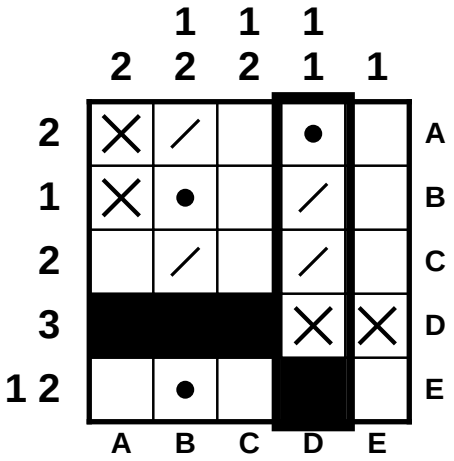
The clue 2 can only sit within columns C-E (3 cells), so wherever it sits, column D is covered and must be filled



Follow it along column B.

Clue #1 (1) can reach no further than row B and clue #2 (2) can start no earlier than row D, so row C between them must be empty

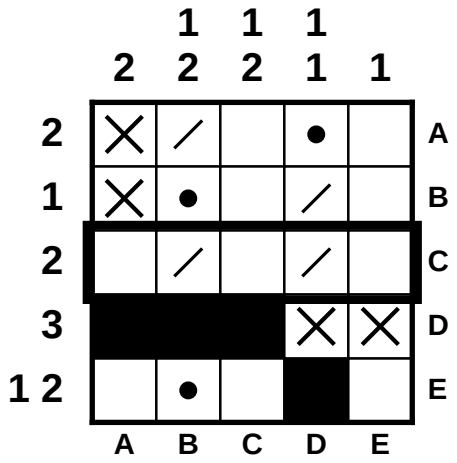
With the cells already known, clues 1, 2 fit this column in only one way, so these cells follow



Follow it along column D.

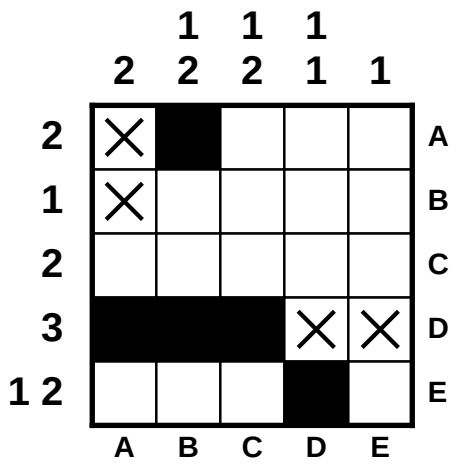
The clues (1, 1) need 2 filled cells in all, and 2 are already filled, so every other cell must be empty

Lesson 9: What if? (continued)



Now row C cannot work.

Row C has clues 2, but with the cells empty at columns B and D there is no way to place its blocks. So this cell can't be empty.



Erase every small mark. The idea was wrong, so the opposite is certain.

So this must be filled instead.

Use this lesson only when you have to. None of the four puzzles in this guide needs it.

Putting it together

- Most of the examples in the lessons were illustrated on rows, but each lesson idea also applies to columns.
- Start with the easy wins: full lines, long blocks, and anything touching an edge.
- Go through every row, then every column, marking what you know for certain.
- Each new mark helps the lines that cross it, so go around again.
- When you are stuck, look again for stretches that are too small, and for lines with only a few ways left.
- If two marks ever disagree, one of them was a mistake. Erase the most recent marks until the line makes sense again.
- Never shade a square only because it looks right. If you cannot say why, leave it blank.

Take your time. There is no clock. Watch the picture emerge as you solve!

Puzzle 1

15 squares across, 10 squares down

A gentle start. Some lines are completely full, so begin there.

	0	0	0	0	0	2	5	9	10	10	10	10	10	14	3
5															
6															
6															
7															
6															
7															
8															
9															
10															
10															

The answer and the picture credit are on page 21.

Puzzle 2

10 squares across, 14 squares down

Mostly long blocks, so Lesson 2 does a lot of the work.

	6	9	11	13	14	14	12	10	7	1
3										
5										
7										
7										
9										
9										
10										
9										
9										
9										
8										
6										
4										
2										

The answer and the picture credit are on page 22.

Puzzle 3

15 squares across, 9 squares down

A wider grid. Lessons 2 and 3 get you going, and Lesson 7 may help later.

	1	2	3	3	6	6	8	9	9	9	8	7	8	8	7
4															
9															
9															
11															
11															
11															
14															
15															
4 4 2															

The answer and the picture credit are on page 23.

Puzzle 4

10 squares across, 15 squares down

The tallest of the four. Lesson 5 may help.

	8	10	6	6	6	6	4	3	2	2
1										
1 1										
1 1										
6										
10										
10										
8										
5 1										
5										
2										
1										
0										
0										
0										
0										

The answer and the picture credit are on page 24.

Puzzle 1: the answer

Part of the picture: York Minster (panel 7 of 25 in the app)

	0	0	0	0	0	2	5	9	10	10	10	10	10	4	3
														1	
5								■	■	■	■	■	■		
6								■	■	■	■	■	■		
6								■	■	■	■	■	■		
7								■	■	■	■	■	■	■	
6								■	■	■	■	■	■		
7							■	■	■	■	■	■	■		
8							■	■	■	■	■	■	■	■	
9							■	■	■	■	■	■	■	■	■
10						■	■	■	■	■	■	■	■	■	■
10						■	■	■	■	■	■	■	■	■	■



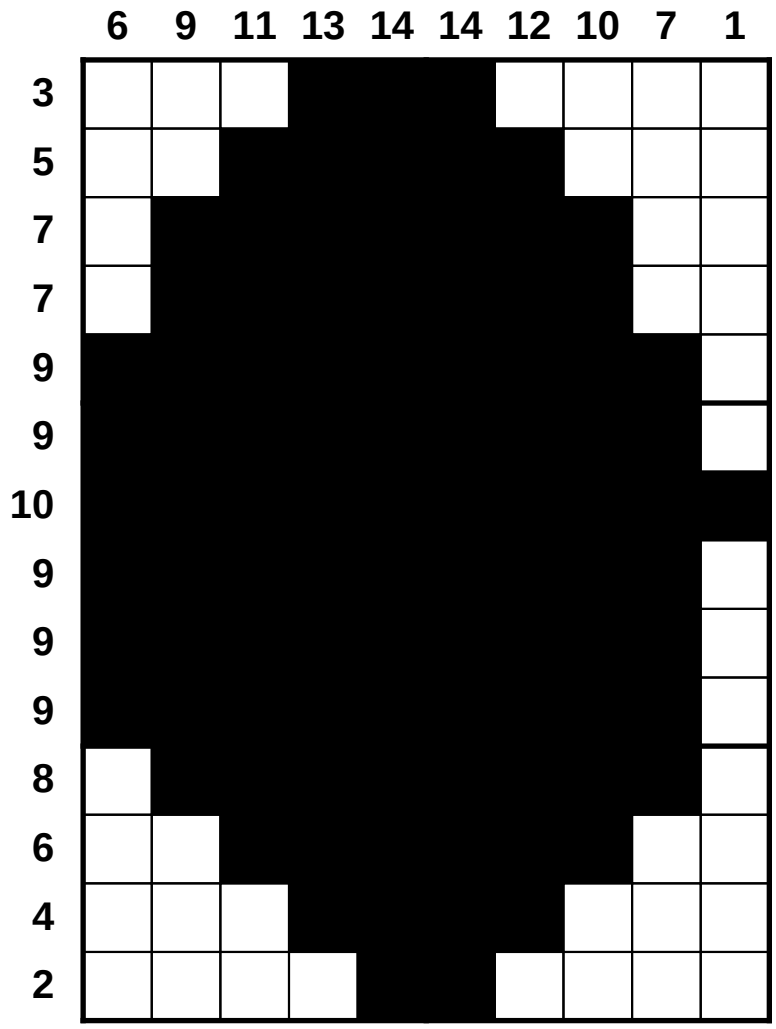
Picture credit: (c) 2026, Steven H. VanderLeest

The matching part of the picture

Check your puzzle against the shaded squares. Every row and column should match its numbers.

Puzzle 2: the answer

The picture: Sand Dollar





Picture credit: (c) 2026, Steven H. VanderLeest

The finished picture

Check your puzzle against the shaded squares. Every row and column should match its numbers.

Puzzle 3: the answer

The picture: Skid Steer Loader

	1	2	3	3	6	6	8	9	9	9	8	7	8	8	7
4							■	■	■	■					
9							■	■	■	■	■	■	■	■	■
9							■	■	■	■	■	■	■	■	■
11					■	■	■	■	■	■	■	■	■	■	■
11					■	■	■	■	■	■	■	■	■	■	■
11					■	■	■	■	■	■	■	■	■	■	■
14		■	■	■	■	■	■	■	■	■	■	■	■	■	■
15	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4 4 2			■	■	■	■		■	■	■	■		■	■	



Picture credit: Retired electrician, CC0, via Wikimedia Commons

The finished picture

Check your puzzle against the shaded squares. Every row and column should match its numbers.

Puzzle 4: the answer

Part of the picture: F-14 Tomcat (panel 2 of 3 in the app)

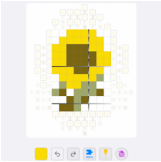
	8	10	6	6	6	6	4	3	2	2
1		■								
1 1		■				■				
1 1		■				■				
6	■	■	■	■	■	■				
10	■	■	■	■	■	■	■	■	■	■
10	■	■	■	■	■	■	■	■	■	■
8	■	■	■	■	■	■	■	■		
5 1	■	■	■	■	■		■			
5	■	■	■	■	■					
2	■	■								
1	■									
0										
0										
0										
0										



Picture credit: SSgt. Lee O. Tucker (USAF), Public domain, via Wikimedia Commons

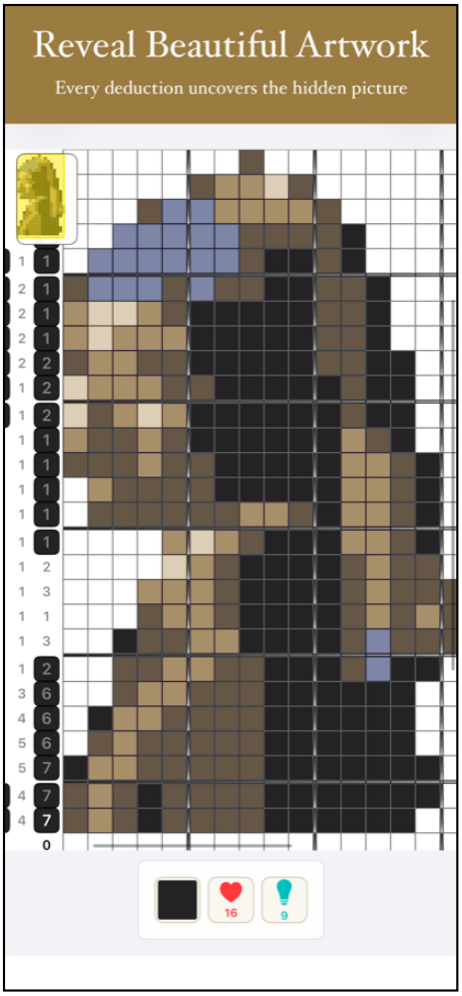
The whole picture

Check your puzzle against the shaded squares. Every row and column should match its numbers.



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LogiSketch is a nonogram app for iPhone, iPad and Mac. Its Starter gallery is free and holds dozens of puzzles, from small to large. Other galleries are one-time purchases. There are no subscriptions and no ads, and it works without an internet connection.



Try it free

Questions? Send an email to support@squishlogic.com

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Nonograms are a pleasant pastime to keep your brain sharp. Enjoy!