THE TABLETOP GIRL

DICE PUZZLE MINIGAME

Quick dice-based puzzle squares ready to throw at your unsuspecting players

Introduction

I think at some point, every Dungeon Master has been running a campaign with a rogue who soon becomes a walking lockpick.

Rogues picking locks throughout a campaign is great, but it can get a little repetitive and tiring at the table; with that high dexterity and proficiency in thieves tools, rolling the dice can start to become a bit of a formality.

Don't get me wrong - it totally depends on your campaign and your players. Some players don't like puzzles, and want to leave fate in the hands of the dice. And those players are awesome too! But that wasn't my players. They absolutely loved solving puzzles.

So I decided to take a risk and add a minigame for lock picking.

My goal was to try and mimic how it would feel to be picking a lock under time pressure, or to carefully pick a lock that might set off a deadly trap and you only have one shot to get it right.

These puzzles seemed to fit that brief. They are more difficult to solve quickly under time pressure, but with more time or without impending danger, players can take their time and be sure of their answer. They can work co-operatively or alone, and there are still plenty of ways to incorporate rolling dice into the puzzles as well.

See "Changing Difficulty" for advice on how to incorporate lock picking rolls or other ability checks.

This mini-game works for:

- Picking locks (of course)
- Hacking consoles in futuristic game settings
- Skill checks for crafting
- Dungeon or temple puzzles

To be honest, anything that requires a dexterous skill, is used repeatedly in your game and has failure consequences that your players would like to have more control over.

Important note about dice

This puzzle is designed to be solved with a tabletop gaming six-sided dice, with written numbers rather than dots on each face. Your dice may also have a different arrangement of numbers on the faces.

Use the images below to check that you have a dice with a matching layout to the one used to create the puzzles.

If you don't have dice that match these images, you can purchase paper templates to make your own dice from my store, but you should also be able to find these dice pretty inexpensively from places like Amazon or gaming stores.

How the Game Works

Start by giving your player the rules to the game (rules for players shown below). When your player wishes to pick a lock in the game you can present them with a puzzle grid, and decide on how difficult you want to make the lock.

Let's start with the game rules, then do an example puzzle.

Player Rules

Each grid has pairs of large numbers marked on it. These large numbers are the dice squares.

These dice squares are paired together, as indicated by a smaller numbers in the corner of each square. Dice squares with the same pairing number are a set.

Start at any dice square by positioning a six-sided dice in the square with the corresponding number face-up, remembering to also match the orientation. 'Roll' the dice around the grid and reach the other dice square in the set, finishing with the new number in the new orientation now facing upwards on the dice.

Sound a bit confusing? Don't worry, it's easy once you see it in action, and I promise it's much easier to explain to your players in person than it is reading the instructions from a PDF.

You can move only vertically or horizontally on the grid by rotating a dice about one of its edges to 'roll' it around the grid. One "roll" per grid square.

Important to Note

- Each set can be completed individually, the paths do not need to be independent of each other.
- You may pass over any grid square, but the path cannot intersect itself and you may only use each square once per path.
- You can start at either dice square in a set.
- For each puzzle none, some, or all of the sets might be possible or impossible. There is no set number of 'correct' sets on your grid.

Consequences

Incorrectly answering a lockpicking challenge will result in a failed lock pick. Your Dungeon Master will tell you your fate.

Solving the Puzzle

To solve the puzzle (and pick the lock successfully), the player needs to declare whether each set on the board is possible or impossible.

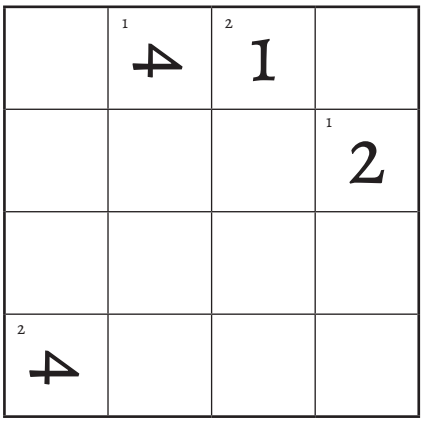
If they are correct, then they pass the lock pick. If they get one wrong, maybe something unfortunate happens. If they get all of them wrong, maybe something even more unfortunate happens.

See "Changing Difficulty" for other options on how to solve the puzzle.

Example Puzzle

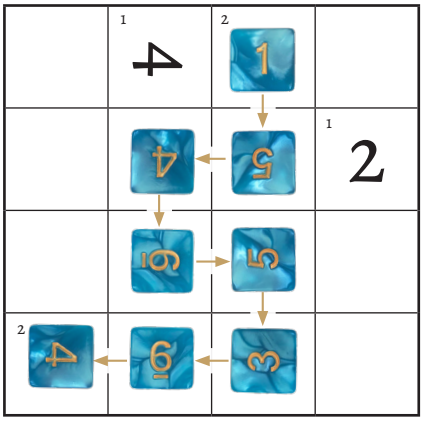
Here is an example of a puzzle you could give to your player. It has two sets of dice squares on it. Remember, sets are shown by the mini numbers up in the corners.

Example grid given to the player



Using the rules, the small numbers in the corner show which dice squares (the squares with the larger numbers) go together. We want to get from the 1 in the top row to the 4 in the bottom row, because they are both part of set two.

Using the dice on the grid



The dice is placed on a dice square with the corresponding number facing upwards and in the correct rotation. The dice is then rolled around the grid until it finishes on the other dice square in the set with the correct number showing.

Experimentation will show that there is no way to complete set one, getting from the 4 in the top row to the 2 in the second row.

In this puzzle, set one is impossible and set two is possible.

The player's job is to guess or work out which sets are possible or impossible and declare this to the dungeon master.

The next section shows you how to make the puzzles harder if they are finding this too easy.

Changing Difficulty

Each puzzle can be made more or less difficult by adjusting the following parameters:

Time

You can add a time limit to solving the puzzles. Perhaps a sand timer in the temple suddenly starts, or they hear the growl of monsters approaching, or the cave starts to collapse and they have to make it through the door in time. You could put a timer on the table counting down, or keep the time limit a secret as you continue to describe the sense of time running out.

Number of Dice & Size of Grid

The more dice on the grid to check and the larger the grid, the more difficult it will be to quickly solve the puzzle. Choose smaller grids with less dice for easier locks.

Adding Dice Rolls

If your player wants to use their lock picking skill to help them with the puzzle, you can ask them to roll a check and then, depending on the result, you can do some of the following:

- Eliminate one set from the board
- Tell them how many sets are possible or impossible
- Tell them the answer to one set
- Give them a free guess before their final answer
- Let them ask one yes or no question
- Give them more time (if there is a time limit)
- Give them a different (easier) puzzle

These are just some examples, and there might be more things, but these are ways that their lock pick skill can still come in handy without bypassing the puzzle entirely.

They might roll multiple times to get more help, and you can warn them that if they roll too low below your chosen DC check they fail the lock pick, and set off a trap or alarm instead.

Finding the Path

The first level of difficulty requires players to simply work out whether each set is possible or impossible. There are logical ways to work this out fairly quickly, and you might find that you want to up the level of difficulty once that starts happening.

The next step, once they can work out which paths are possible, is to find the paths and draw them out.

Each puzzle comes with a solution for each set that is possible, but that's not to say there is not more than one path for each set. The rules for paths are:

- A path cannot cross over or go back on itself. Think original snake.
- A path for one set may cross the path or dice squares of a different set.

Changing the Requirements

Perhaps for this lock players only need to get one of the sets right, or just need to find a single path between any of the sets on the grid to complete the puzzle.

You can be creative and flexible to come up with goals that best suit your players and your game setting.

A Quick Note About Multiple Solutions

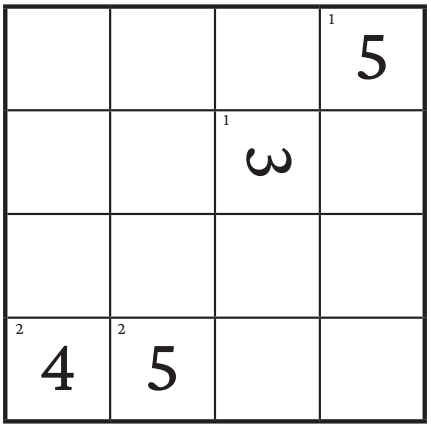
As mentioned in How The Game Works, each sets are either possible or not possible. Sets that are possible may also have multiple solutions.

Listing all those solutions can get extremely messy on the answer sheet (attempts were made), so instead the answer sheet will tell you whether each set is possible or not and then show the easiest solution for that puzzle.

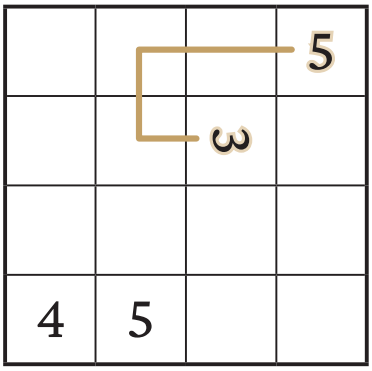
Changing Difficulty

If you decide to use one of the tips for changing difficulty that requires the players to find a valid path, rather than just guessing possible or impossible, be aware that your player may not have the solution in the answer sheet, but could still be correct.

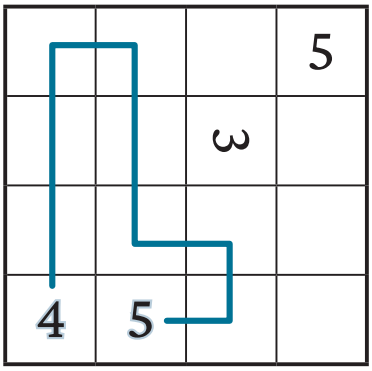
Puzzle Example



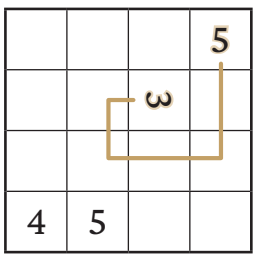
Set One Shown Solution

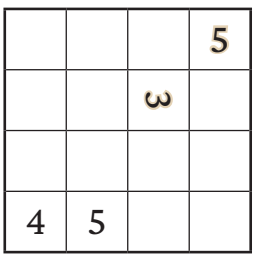


Set Two Shown Solution



Alternate Solutions (Not Shown)





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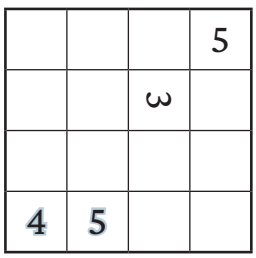

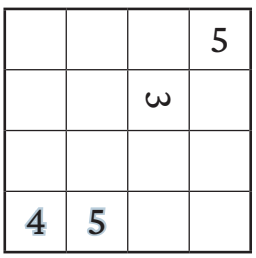

Dice Puzzle Minigame | Player Rules

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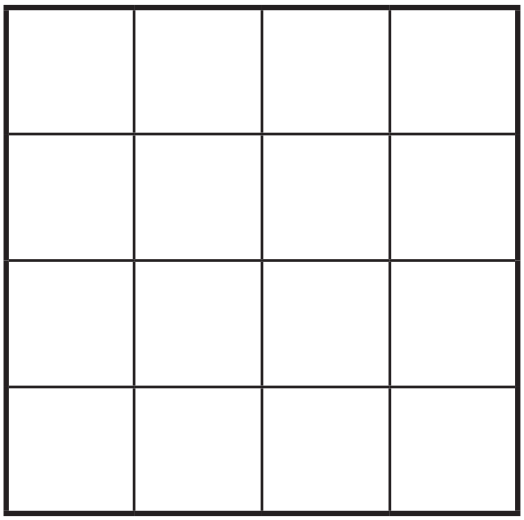
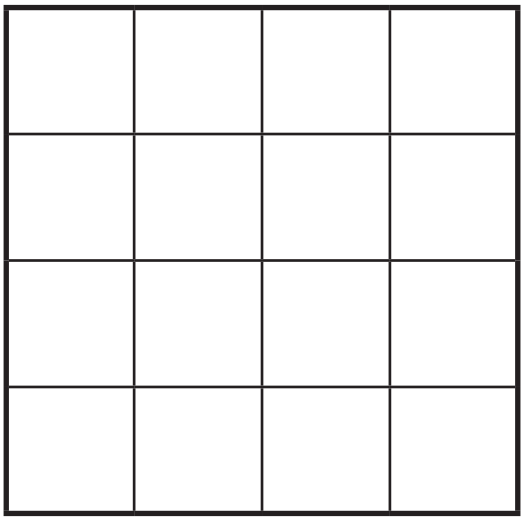
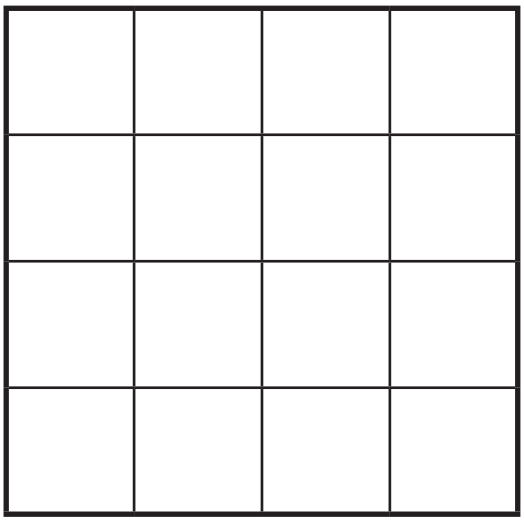
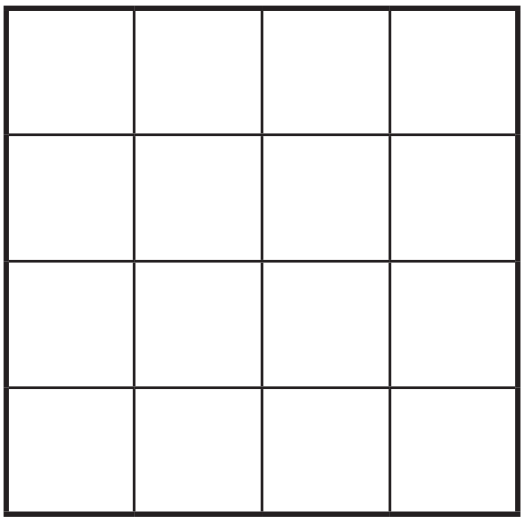
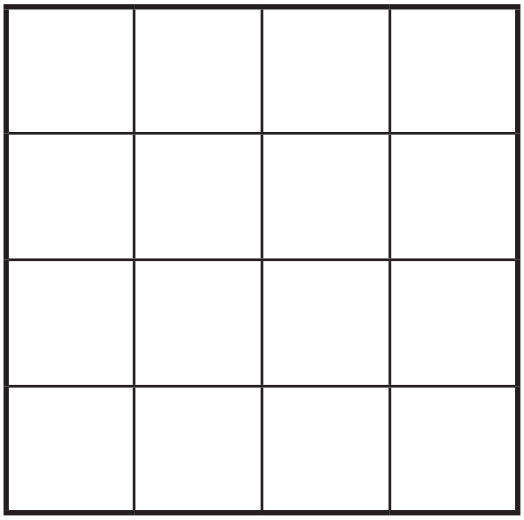
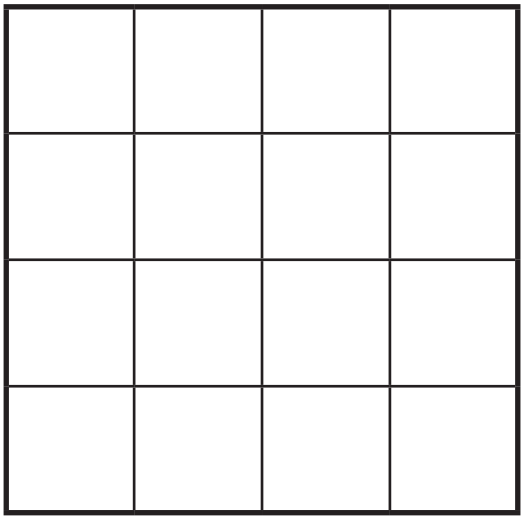






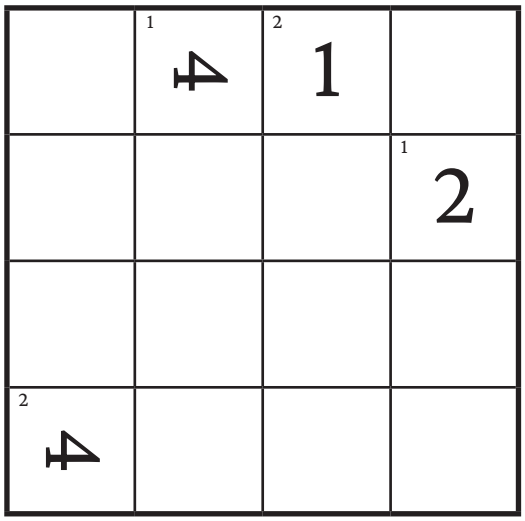




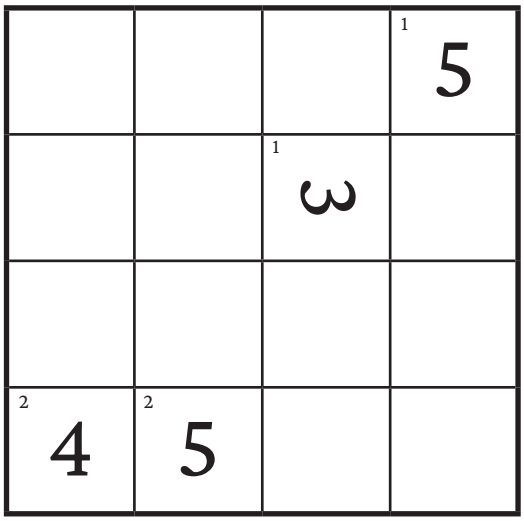


Puzzles

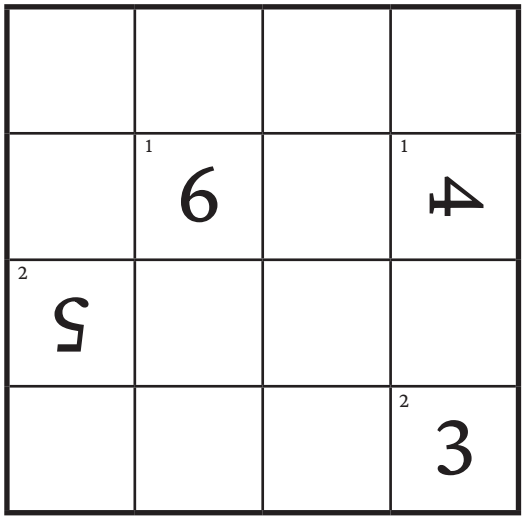
Puzzle 1



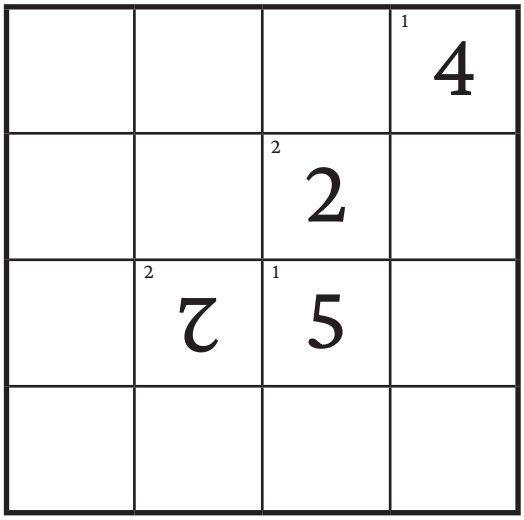
Puzzle 2



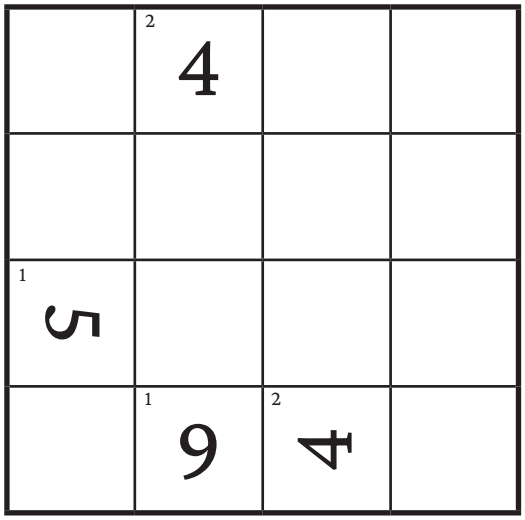
Puzzle 3



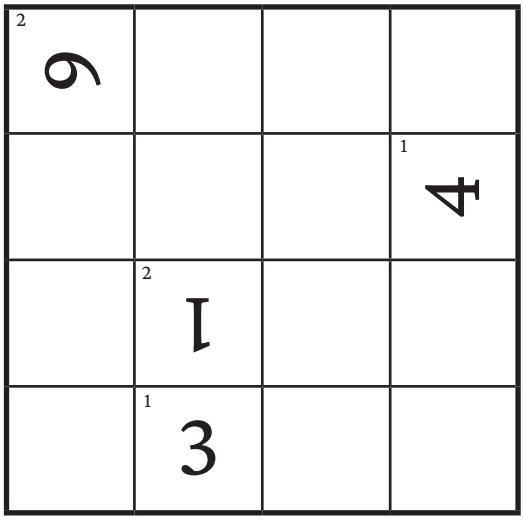
Puzzle 4



Puzzle 5



Puzzle 6



Puzzle 7

			2 1
1 2	2 2		
			1 3

Puzzle 8

		1 3	
2 2			
2 5	1 4		

Puzzle 9

			1 3
			2 4
2 3	1 2		

Puzzle 10

		1 1	
	2 6		
			2 9
1 1			

Puzzle 11

			2 2
1 5			
	2 9		1 5

Puzzle 12

1 1	2 3		1 2
			2 9

Puzzle 13

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

Puzzle 14

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

Puzzle 15

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

Puzzle 16

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

Puzzle 17

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

Puzzle 18

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

Puzzle 19

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

Puzzle 20

1 2			
			2 5
		3 6	
3 3	2 3		1 3

Puzzle 21

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

Puzzle 22

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

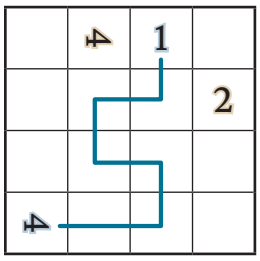
Puzzle 23

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

Puzzle 24

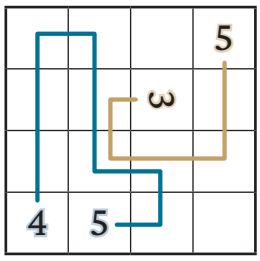
1 5			
		3 3	2 2
		1 1	
3 3	2 2		

Answers



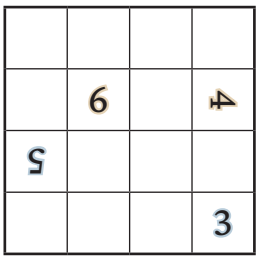
Puzzle 1:

Set 1 - Impossible
Set 2 - Possible



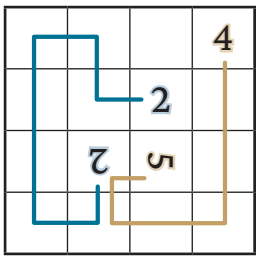
Puzzle 2:

Both sets possible



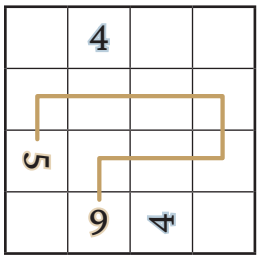
Puzzle 3:

Neither set possible



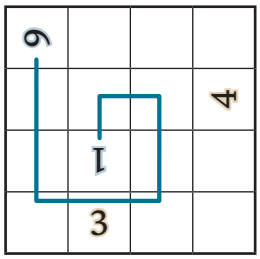
Puzzle 4:

Both sets possible



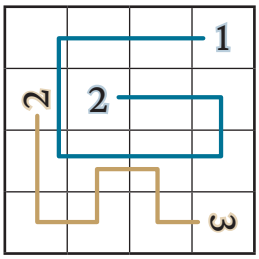
Puzzle 5:

Set 1 - Possible
Set 2 - Impossible



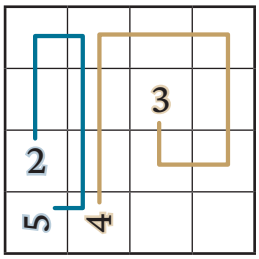
Puzzle 6:

Set 1 - Impossible
Set 2 - Possible



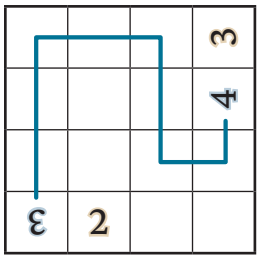
Puzzle 7:

Both sets possible



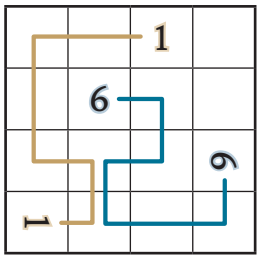
Puzzle 8:

Both sets possible



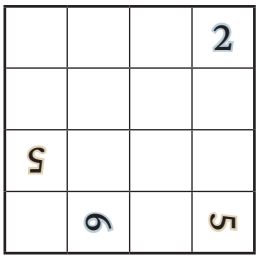
Puzzle 9:

Set 1 - Impossible
Set 2 - Possible



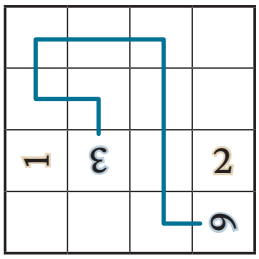
Puzzle 10:

Both sets possible



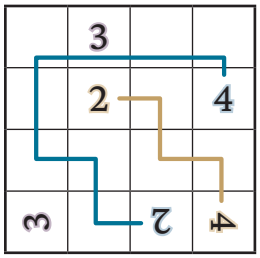
Puzzle 11:

Neither set possible



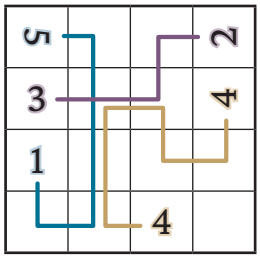
Puzzle 12:

Set 1 - Impossible
Set 2 - Possible



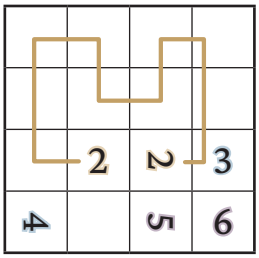
Puzzle 13:

Set 1 - Possible
Set 2 - Possible
Set 3 - Impossible



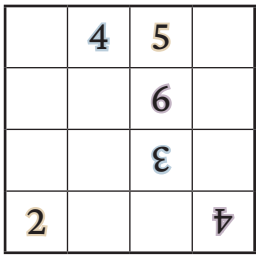
Puzzle 14:

All sets possible



Puzzle 15:

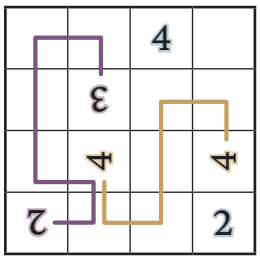
Set 1 - Possible
Set 2 - Impossible
Set 3 - Impossible



Puzzle 16:

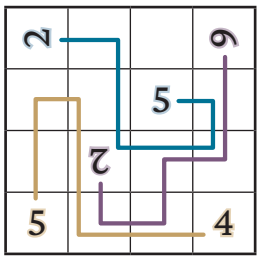
No sets are possible

Answers



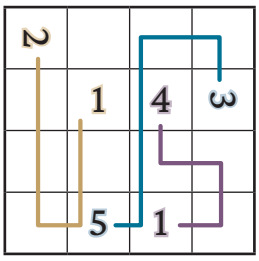
Puzzle 17:

Set 1 - Possible
Set 2 - Impossible
Set 3 - Possible



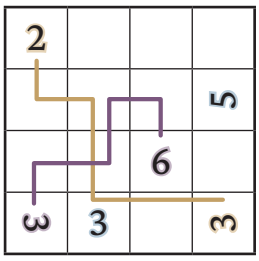
Puzzle 18:

All sets are possible



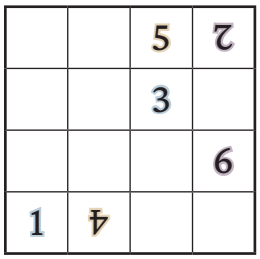
Puzzle 19:

All sets are possible



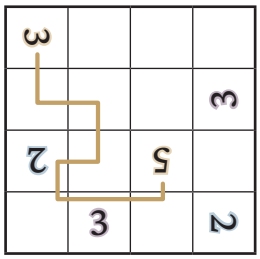
Puzzle 20:

Set 1 - Possible
Set 2 - Impossible
Set 3 - Possible



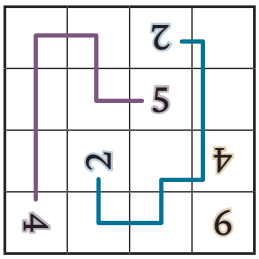
Puzzle 21:

No sets possible



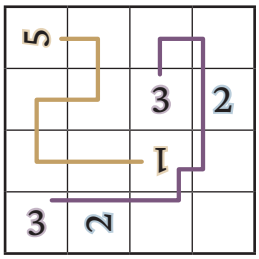
Puzzle 22:

Set 1 - Possible
Set 2 - Impossible
Set 3 - Impossible



Puzzle 23:

Set 1 - Impossible
Set 2 - Possible
Set 3 - Possible



Puzzle 24:

Set 1 - Possible
Set 2 - Impossible
Set 3 - Possible