Paint by Numbers

These nine puzzles feature a unique blend of logic and art. The numbers are all you need to determine which squares should be filled in to form a picture. Here's how it's done:

The numbers outside each row and column tell you how many groups of black squares there are in that line and, in order, how many consecutive black squares there are in each group. For example, 4 5 9 2 tells you that there will be four groups that will contain, in order, 4, 5, 9, and 2 consecutive black squares. The fact that the numbers are separated tells you that there is at least one empty square between them. (There may also be empty squares at the ends of lines.) The trick is to figure out how many empty squares come between the black ones.

Here's a starting hint: When there's a single number in a row and that number is greater than half the number of squares in the row, you can fill in one or more center squares. For example, in the sample below (Figure 1), which is 10 squares wide, the sixth and seventh rows each have the number 8. No matter how you place eight consecutive black squares in a row, the middle six squares will be filled in (Figure 2). Similar logic can be used to start a line that has more than one number in it. In the sample, the third column contains the numbers 1 6. The single black square and the following empty square must take up at least two squares above the 6. No matter how they get placed, the fifth through eighth squares of the column will be black (Figure 3). Figure 4 shows the completed picture.

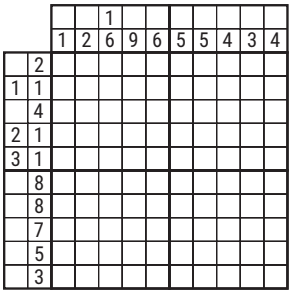


Figure 1

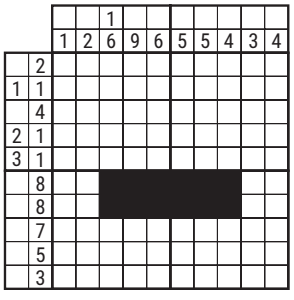


Figure 2

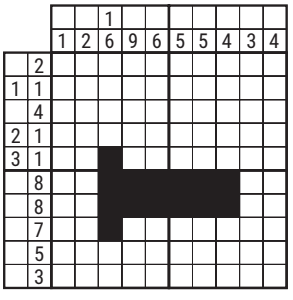


Figure 3

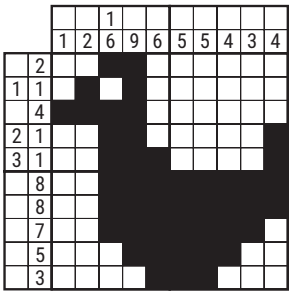
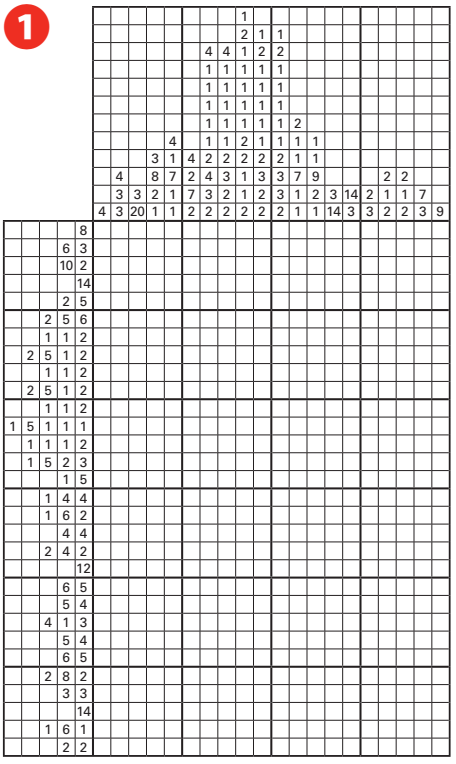
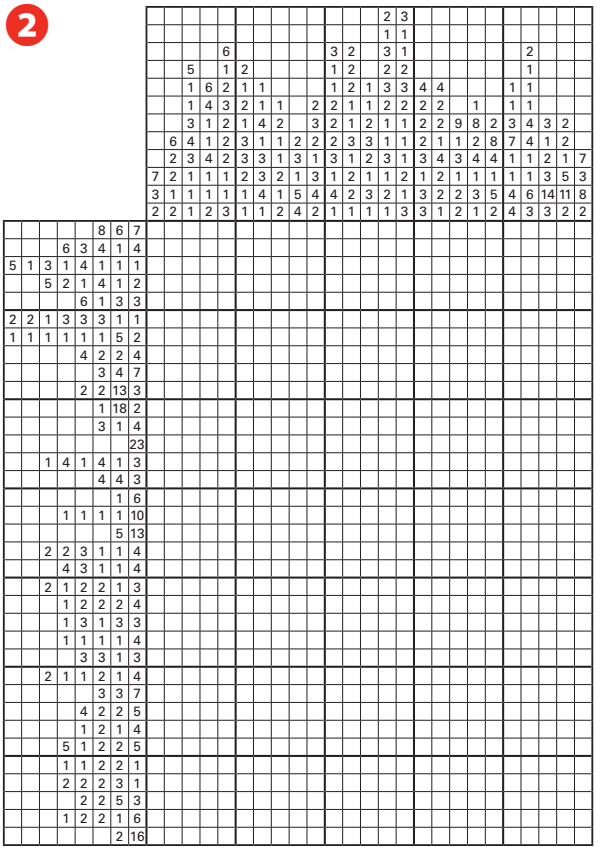


Figure 4

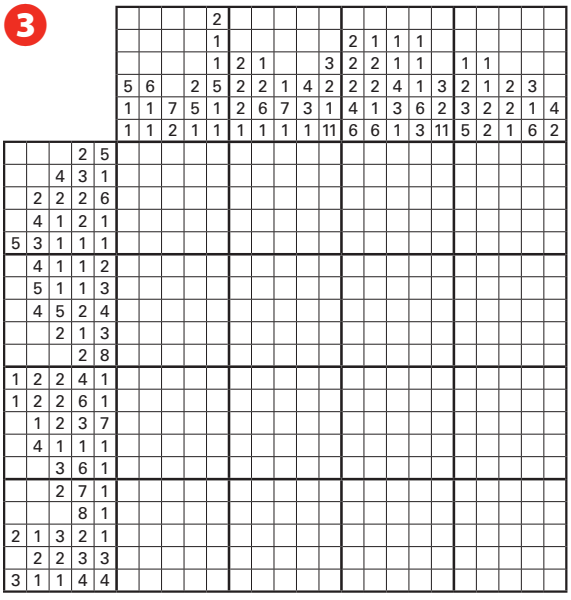
1



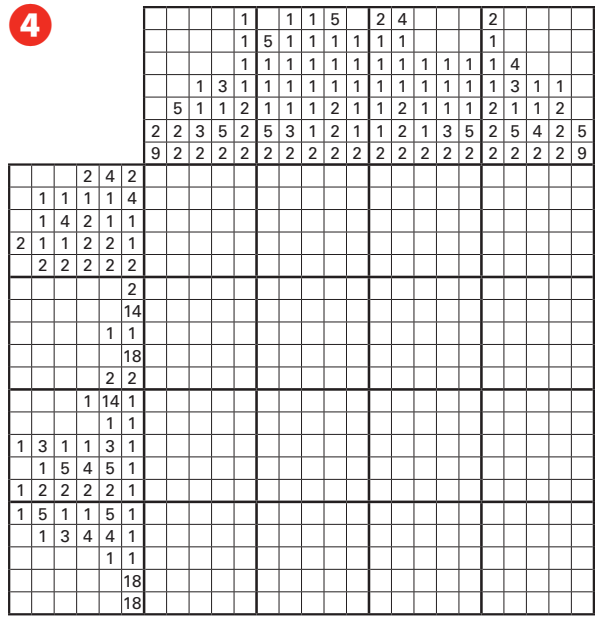
2



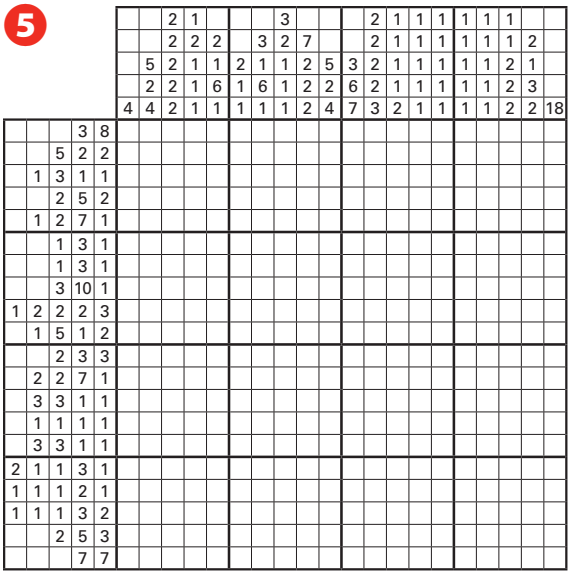
3



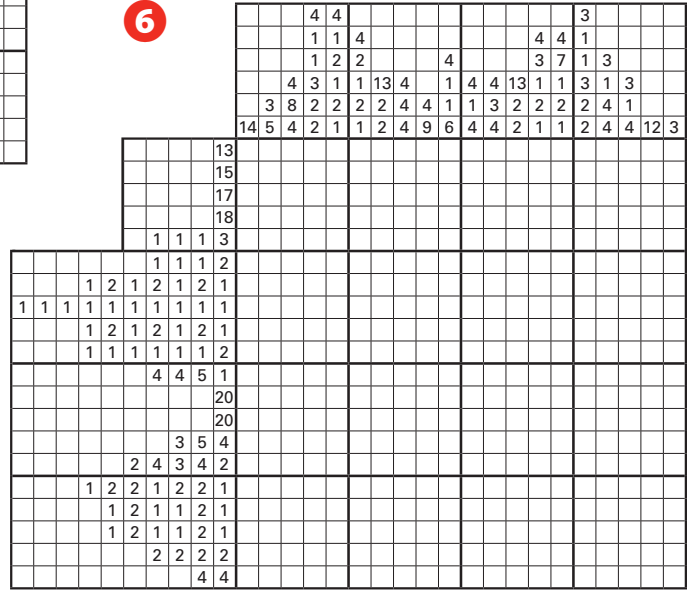
4



5



6



Paint by Numbers

7

Column clues (left to right, read top to bottom):

Column	Clue
1	11
2	11
3	19
4	4 9
5	3 5 6 1
6	2 3 2 1 1
7	1 3 1 5
8	1 1 2 2
9	2 1 1 2
10	2 2 2 8
11	3 1 1 6
12	2 6 1
13	1 1 1 1
14	1 5
15	2
16	1 1 2
17	1 1 1 3 8
18	2 3 4
19	3 3 4 3
20	1 3 2 1 2 4 3
21	5 3 7 2
22	5 2 8 1
23	3 3 2 6 1
24	2 1 2 1 5 1
25	1 1 3 2 1 6

Row clues (top to bottom, read left to right):

Row	Clue
1	4
2	2 1 3
3	1 1 1 2 1 3 1
4	2 3 5
5	1 1 1 2 5 1
6	1 2 2 3
7	2 5 2 1
8	1 1 1 1 1 1
9	1 2 1 1
10	1 1 4
11	1 1 3 2 3 3
12	1 1 2 1 2 1 1 1 1
13	1 2 2 1 3 3
14	1 3 1 2 1 1
15	3 2 3 1
16	3 2 3 1
17	4 4 1
18	5 1 1 1 5 1
19	6 1 2 1 5
20	5 1 3 1 1 6
21	5 1 3 1 1 5
22	5 1 3 1 2 4
23	5 1 3 1 4 3
24	4 1 2 1 5 1
25	6 4 9

8

Column clues (left to right, read top to bottom):

Column	Clue
1	4
2	6
3	2 2
4	1 4
5	1 1 6
6	1 8
7	3 8
8	1 2 4 2
9	2 4 3 2
10	1 5 2 2
11	1 3 7 1 2
12	1 2 2 9 2
13	8 1 2 1 2
14	1 2 2 9 2
15	1 3 7 1 2
16	1 5 2 2
17	2 4 3 2
18	1 2 4 2
19	3 8
20	1 8
21	1 1 6
22	1 4
23	2 2
24	7
25	4

Row clues (top to bottom, read left to right):

Row	Clue
1	1
2	1
3	5
4	1
5	1
6	1
7	1
8	3
9	2 2
10	1 1 1
11	3 4 4 3
12	2 1 2 3 2 1 2
13	2 1 1 1 1 1 2
14	2 1 2 2 1 2
15	2 3 4 4 3 2
16	2 3 5 5 3 2
17	5 5 5 5
18	5 4 4 6
19	5 3 3 5
20	5 2 2 5
21	5 1 1 5
22	15
23	1 1
24	13
25	13

9

Column clues (top to bottom, columns left to right)

																					1			1															
																					1	1	1	1															
			1																	1	3	1	1	3	1	1	1			1	1	1	1	1					
1	1		1		1			3												5	1	2	3	1	1	1	1	1	1	1	1	7	6	4		1			
1	1	1	2	1	1			1			3			2	3	3	3		1	1	7	1	3	6	3	3	3	1	1	3	5	4	2	2	1	3	1	1	
5	6	1	9	1	5		7	4	5	4	5	2		2	1	1	1	1	7	9	10	4	7	7	5	5	4	6	3	2	2	1	4	5	4	3	3	4	1
6	7	7	3	3	9	15	7	7	1	2	2	9	2	5	4	4	3	9	2	1	1	15	3	2	12	6	4	4	3	3	3	4	4	4	24	14	2	3	8
1	1	8	4	14	3	3	9	10	10	3	2	2	14	3	3	2	10	11	10	4	1	1	1	1	3	3	3	3	4	1	1	1	1	1	1	1	1	1	1
1	1	1	1	4	5	6	12	13	25	25	25	25	25	25	25	25	23	20	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Row clues (top to bottom)

6
8
6 5 2 22
4 6
1 1 4 3
2 3 3 4
1 1 3 2 6
6 2 3 2 11 7
3 4 2 3 2
2 4 3 2 1
7 1 3 2 1
7 4 2 1
1 6 1 2 2
5 3 2 1 2
5 2 5 2 2
3 1 4 4 6
2 2 2 3 1 3
3 1 2 3 1 2
2 2 2 3 3 1
3 1 3 3 6
4 6 9
4 4 1 8
4 4 1 3 2
4 5 1 3 2 3
4 8 3 2 2
1 11 6 3 2 2
14 4 3 1 2
15 4 3 2 2
16 3 3 1 2
18 2 3 2 2
18 1 3 2 2
20 3 2 2
21 2 3 2
20 3 2 2
6 12 3 2 2
1 2 11 2 2 2
1 11 2 3 2
2 12 2 2 2
1 17 2 2 2
20 2 2 2
4 14 2 2 3
3 13 2 2 2
3 13 2 2 3
3 14 2 1 3
3 15 3 3
21 8
19 5
2 17 19
16
4 12 20