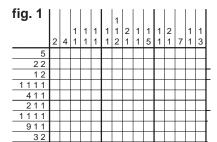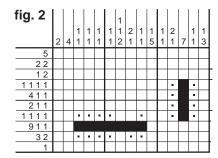# How To Solve Logic Art

(fig. 1) In the first row of the example, you will blacken 5 consecutive squares. All other squares remain white. In the second row you'll blacken 2 squares, leave at least 1 square white, then blacken 2 more. To determine which squares are blackened and which remain white requires logical deduction and cross-referencing from row to column and back.
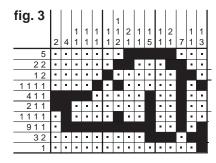
(fig. 2) To start, look for a row or column with a high number of squares to blacken. The example has two good choices: In the third-to-last column, no matter which 7 consecutive squares will eventually be blackened, the middle 4 squares will necessarily be black. You can go back later and figure out which 3 of the remaining 6 squares will be blackened. In the third-to-last row you may confidently color the third through the ninth squares. With 13 of the 15 squares accounted for (9 black + at least 1 white + 1 black + at least 1 white + 1 black = 13), the group of 9 can begin no later than the third square for all to fit. Blacken only 7 squares because you cannot yet eliminate the possibility of the 9 beginning in the first square.

Comparing the 7 blackened squares in the third-to-last row to their corresponding columns, you can see that, in 5 of the columns, the squares both immediately above and immediately below the blackened ones will remain white; no number of consecutively blackened squares in those columns is greater than 1. Now make the same comparisons for the 4 blackened squares in the third-to-last column and their corresponding rows. Indicate a white square by placing a dot or lightly drawing an X in that square. This will not harm the picture. You may also choose to work with two contrasting colors (rather than black and white), filling in the non-blackened squares in the second color.

Once you know which squares must be white, you can look for more squares that must be black. As you continue, the picture will begin to take shape. When you have accounted for all of the squares your Logic Artwork is complete. (fig. 3)
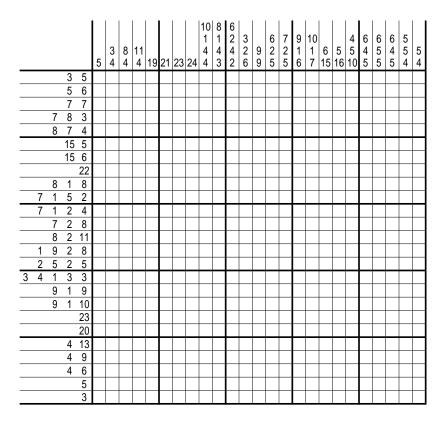

fig. 1

fig. 2

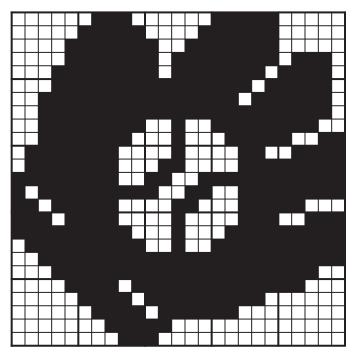
fig. 3

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LOGIC ART

Logic Art is artwork you create using logical deduction. Each row and column of the diagram begins with one or more numbers. The numbers indicate consecutive squares to be blackened in that order.

Column clues (left to right):

5 | 3 4 | 8 4 | 11 4 | 19 | 21 | 23 | 24 | 10 1 4 4 | 8 1 4 3 | 6 2 4 2 | 3 2 6 | 9 9 | 6 2 5 | 7 2 5 | 9 1 6 | 10 1 7 | 6 15 | 5 16 | 5 10 | 4 5 | 6 4 5 | 6 5 5 | 6 4 5 | 5 5 4 | 5 4

Row clues (top to bottom):

- 3 5
- 5 6
- 7 7
- 7 8 3
- 8 7 4
- 15 5
- 15 6
- 22
- 8 1 8
- 7 1 5 2
- 7 1 2 4
- 7 2 8
- 8 2 11
- 1 9 2 8
- 2 5 2 5
- 3 4 1 3 3
- 9 1 9
- 9 1 10
- 23
- 20
- 4 13
- 4 9
- 4 6
- 5
- 3

Solution on the following page

**LOGIC ART
SOLUTION**

Ball and glove