12 Days of ChrisMATH — Day 5
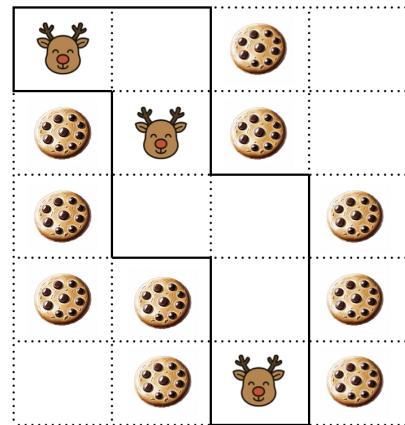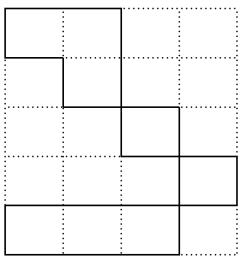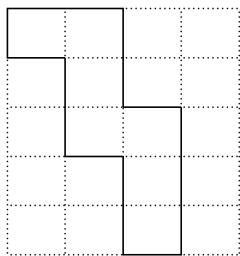
Santa's Reindeer

Every year at the North Pole, Santa's elves bake mountains of warm cookies and wrap sparkling sweets as treats for the reindeer. This year, the elves got a little carried away. They've scattered trays of cookies all over the snowy fields where the reindeer like to roam. Santa is worried. If the reindeer gobble up too many treats, they'll become too round and heavy to pull the sleigh on Christmas Eve!
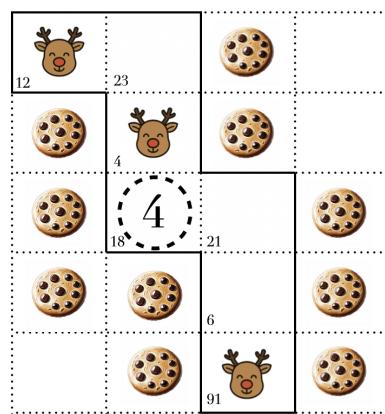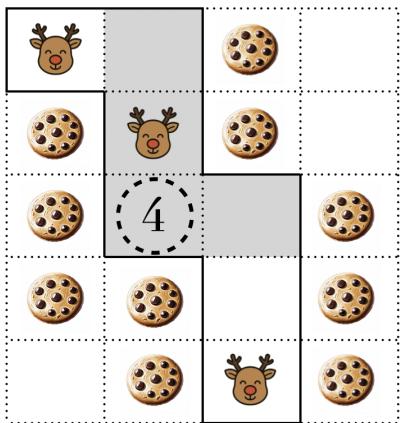
Can you help Santa build an enclosure separating the reindeer from the holiday treats to save Christmas?

How to Play

- Draw a fence along the grid lines. The fence must form one single closed loop that does not cross or branch.

- Reindeer must be kept inside the fence. Cookies must be kept outside the fence.
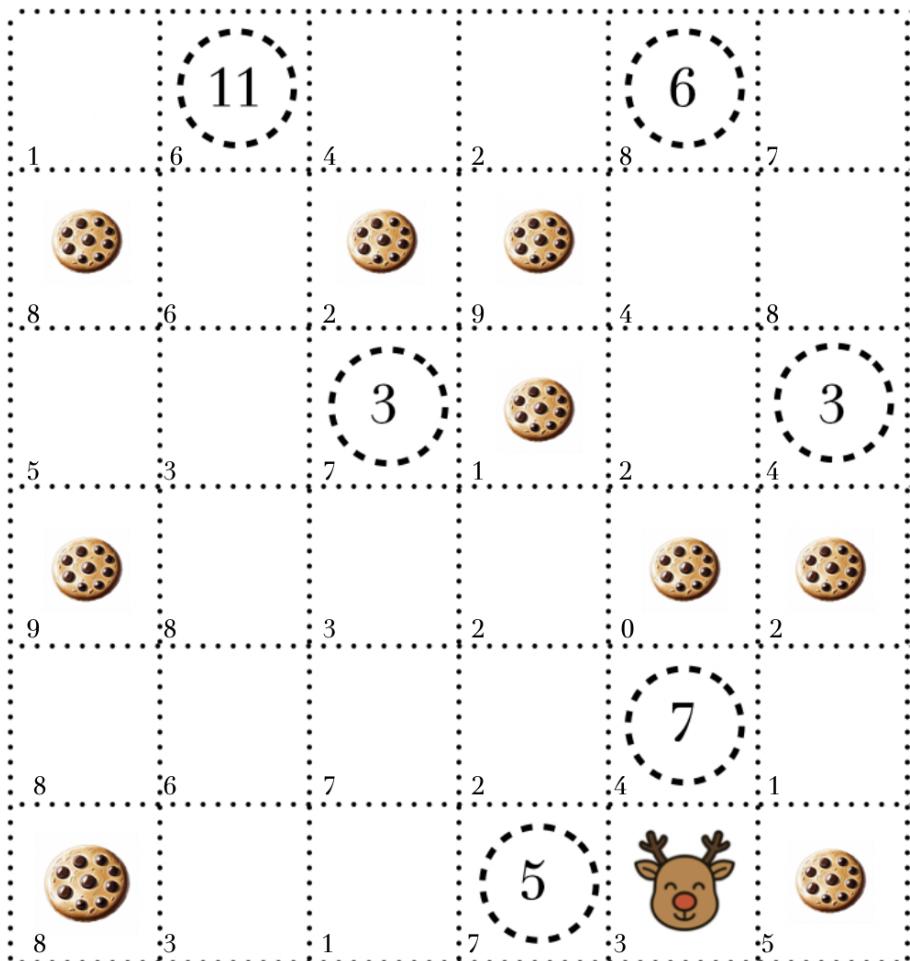
- Some puzzles contain circled numbers—these must also be inside the fence. The numbers shows how many grid squares are visible inside the enclosure looking North/East/South/West including itself. You cannot see through the fence.

- Sum the numbers in the bottom left corner for each cell of your enclosure to submit your answer.
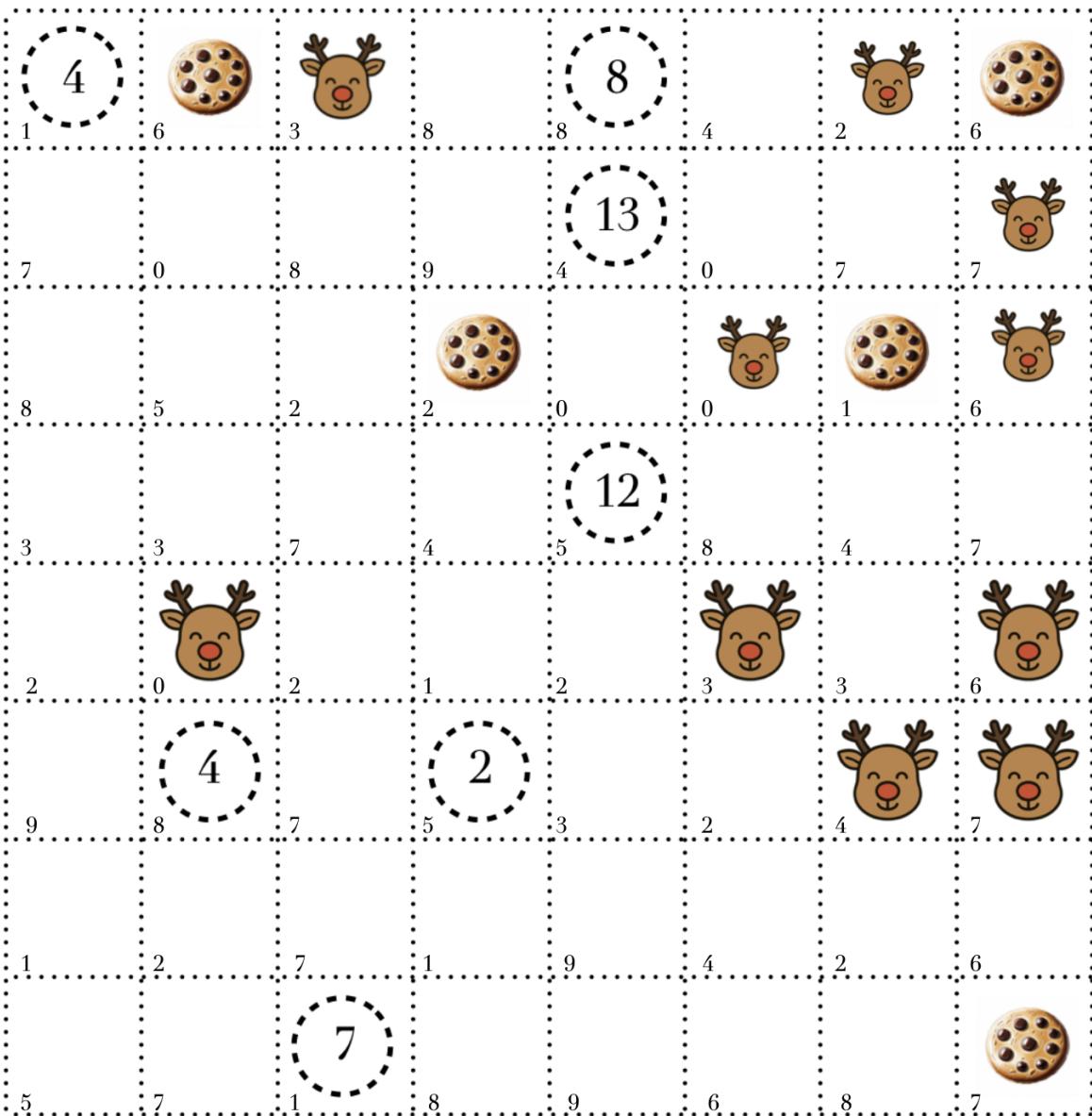
$$12 + 23 + 4 + 18 + 21 + 6 + 91 = 175$$

There is **exactly one** correct fence for each puzzle. Draw the fence carefully and help Santa keep Christmas on track!

Level 1

Circled values: 11, 6, 3, 3, 7, 5

Grid numbers:

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

Level 2

A Christmas-themed puzzle grid (8 columns × 7 rows) containing reindeer and cookie icons, circled target numbers, and small corner digits.

Row 1 cells (corner digits): 1, 6, 3, 8, 8, 4, 2, 6 — circled ④ in column 1, cookie in column 2, reindeer in column 3, circled ⑧ in column 5, reindeer in column 7, cookie in column 8

Row 2 cells (corner digits): 7, 0, 8, 9, 4, 0, 7, 7 — circled ⑬ in column 5, reindeer in column 8

Row 3 cells (corner digits): 8, 5, 2, 2, 0, 0, 1, 6 — cookie in column 4, reindeer in column 6, cookie in column 7, reindeer in column 8

Row 4 cells (corner digits): 3, 3, 7, 4, 5, 8, 4, 7 — circled ⑫ in column 5

Row 5 cells (corner digits): 2, 0, 2, 1, 2, 3, 3, 6 — reindeer in column 2, reindeer in column 6, reindeer in column 8

Row 6 cells (corner digits): 9, 8, 7, 5, 3, 2, 4, 7 — circled ④ in column 2, circled ② in column 4, reindeer in column 7, reindeer in column 8

Row 7 cells (corner digits): 1, 2, 7, 1, 9, 4, 2, 6

Row 8 cells (corner digits): 5, 7, 1, 8, 9, 6, 8, 7 — circled ⑦ in column 3, cookie in column 8

Level 3

(6) 1	6	(4) 3	8	8	4	2	6
7	8	9	4	6	7	7	2
8	0	2	4	0	1	5	1
3	5	7	5	2	9	6	676767
2	3	2	2	3	9	7	5
9	0	5	9	3	9	(6) 6	1
1	8	7	3	4	3	2	4
5	2	7	1	(8) 6	9	7	8
7	1	8	9	6	6	3	5
1	2	3	1	2	9	3	2