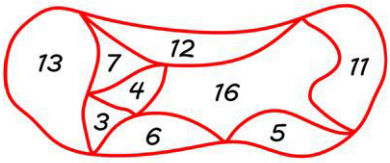
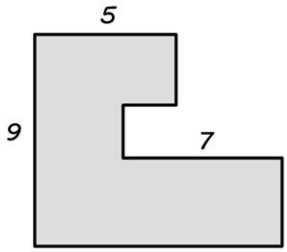
A Pair of Pretty Perimeter Puzzles

3 April 2026

Jim Stevenson





Here are two puzzles[1] from Alex Bellos's Monday puzzles.

Ring it. Each region has a perimeter given by its enclosed number. What is the length just along the edge of the entire figure?

Round the block. Assuming all corners are right angles, what is the perimeter?

Today's puzzles all come from … the Hyde Park Math Zine! This delightful publication is written in pen on a single folded sheet of paper, has a print run of 30 copies, and is distributed in the neighbourhood of Hyde Park in Austin, Texas.

Fanzine culture is well established in sports and music. Math educator Kevin Gately thought the format would work for puzzles too. "It dawned on me that there might be people in my community who find the novelty of a hyper-local math zine to be amusing and/or curious," he said. And it seems there are.

Each issue of HPMZ presents three problems, with easily understandable answers, and let's not forget the cover artwork! Gately's puzzles are mostly taken from other sources, and tweaked. Here are [two] that took my fancy.

My Solutions

Ring it.

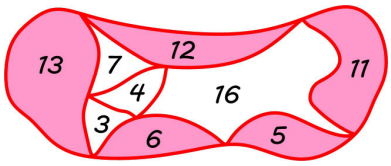


Figure 1

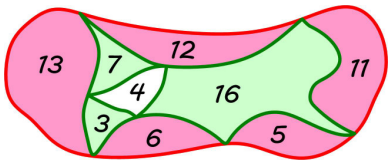


Figure 2

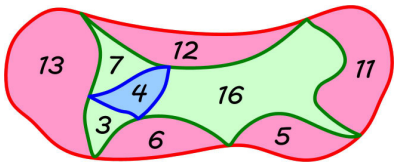


Figure 3

Sum up the perimeters of the outer regions (Figure 1) to get 13 + 12 + 11 + 5 + 6 = 47. But that includes portions of the perimeters that are interior to the figure. So subtract the sum of the perimeters of the regions adjacent to these interior sections (Figure 2) to get 47 – (16 + 3 + 7) = 47 – 26 =21. But we have subtracted too much, namely the perimeter of length 4, so we need to add that back in (Figure 3) to get 21 + 4 = 25.

Round the block.

Slide the bottom section the same number of units to the right as the indentation and so preserving the length of the perimeter of the figure (Figure 4). From that we instantly see that the perimeter is 2(9 + 12) = 42.

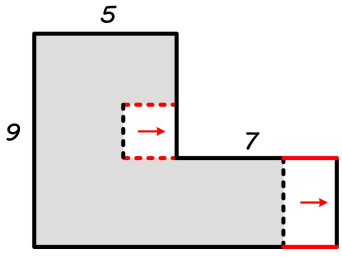


Figure 4

[1] 10 March 2026 (https://www.theguardian.com/science/2026/mar/16/can-you-solve-it-are-you-a-match-for-the-dinkiest-mag-in-maths)

Bellos Solutions

The first solution is the same as mine.

Ring it.

The length of the perimeter is the perimeters of the outer areas (12, 11, 5, 6, and 13) MINUS the perimeters of the adjacent areas (7, 3 and 16) PLUS the perimeter of the final area (4).

$$47 - 26 + 4 = 25$$

Or think of it from the inside out. The perimeter of the internal section with numbers 3, 4, 7 and 16 is $3 + 7 + 16 - 4 = 22$. (You need to subtract four since otherwise you are including lines that are not in the perimeter of that section.)

P is the sum of perimeters of the outer areas, which is 47, minus the perimeter of the section with numbers 3, 4, 7 and 16. Thus $P = 47 - 22$.

Round the block

Thinking vertically: $a + b + c = 9$.

Thinking horizontally: $5 - x + 7 = y$.

(Thus $x + y = 12$)

The perimeter is thus $9 + 5 + 7 + a + b + c + x + y = 42$

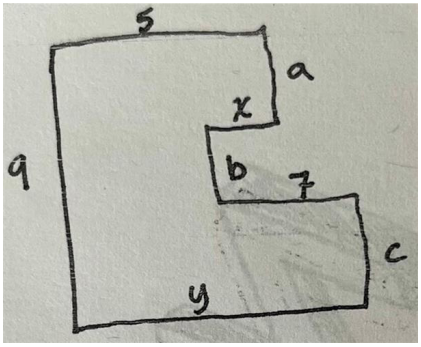


Figure 5