



Problem of the Week

Problem D

Sum New Year!

The positive integers are written consecutively in rows, with seven integers in each row. That is, the first row contains the integers 1, 2, 3, 4, 5, 6, and 7. The second row contains the integers 8, 9, 10, 11, 12, 13, and 14. The third row contains the integers 15, 16, 17, 18, 19, 20, and 21, and so on.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
⋮	⋮	⋮	⋮	⋮	⋮	⋮

The *row sum* of a row is the sum of the integers in the row. For example, the row sum of the first row is $1 + 2 + 3 + 4 + 5 + 6 + 7 = 28$.

Determine the numbers in the row that has a row sum closest to 2024.

