

π day 2021 digit puzzle (basic operations)

Make the year 2021 using the first digits of π (including 3) exactly once, in order, together with the following operations (in addition to parentheses):

- Standard operations: $+$, $-$, \times , \div
- Concatenation (that is, “glueing” digits together) — note that you can only glue the original digits together, so using 3, 1, and 4 you can make 31, 14, or 314, but you *cannot* make 24 by taking $3 - 1 = 2$ then glueing the 4 after

Your goal is to use as few digits of π as possible.

For example,

$$\begin{aligned} 2021 = & (3 + 1 + 4 + 1) \times (59 + 2 + 6 + 5 + 3 \times 5) \\ & + 89 \times (79 - 32 - 3 \times 8) - 4 \times 6 \times 2 \times (6 + 4) \\ & - 3 \times 3 \times 8 \times 3 - 2 \times 7 \times 9 + 5 + 0 \times 2 \times 8 + 8 \end{aligned}$$

This uses 36 digits. This is, of course, not optimal. How few digits can you use?