

1 Example 3: $2 + 3$

Breaking down the recursion step-by-step:

$$\begin{aligned}2 + 3 &= (2 + 2) + 1 \\&= ((2 + 1) + 1) + 1 \\&= (((2 + 0) + 1) + 1) + 1 \\&= ((2 + 1) + 1) + 1 \\&= (3 + 1) + 1 \\&= 4 + 1 \\&= 5\end{aligned}$$