- Have you ever used an app that does word wrap, like Microsoft Word? How does it figure out where to wrap so that the line length stays consistent? Dynamic programming!

EXERCISE

9.3 Draw and fill in the grid to calculate the longest common substring between *blue* and *clues*.

Recap

- Dynamic programming is useful when you're trying to optimize something given a constraint.
- You can use dynamic programming when the problem can be broken into discrete subproblems.
- Every dynamic-programming solution involves a grid.
- The values in the cells are usually what you're trying to optimize.
- Each cell is a subproblem, so think about how you can divide your problem into subproblems.
- There's no single formula for calculating a dynamic-programming solution.