```
real grid[n+1,n+1], newgrid[n+1,n+1];
bool converged = false;
process Grid[i = 1 to n, j = 1 to n] {
  while (not converged) {
    newgrid[i,j] = (grid[i-1,j] + grid[i+1,j] +
                    grid[i,j-1] + grid[i,j+1]) / 4;
    check for convergence as described in the text;
    barrier(i);
    grid[i,j] = newgrid[i,j];
    barrier(i);
  }
}
```

Figure 3.19 Grid computation for solving Laplace's equation.