**(a)**

```
1: Parallel.foraxes(
2:  backend, (2:N-1, 2:N-1, 2:N-1)
3: ) do i, j, k
4:  dUdt[i, j, k] = - (U[i+1, j, k] - U[i-1, j, k]) / (2 * dx)
5: end
```

**(b)**

```
1: do concurrent (k = 2:N-1, j = 2:N-1, i = 2:N-1)
2:  dUdt(i, j, k) = - (U(i+1, j, k) - U(i-1, j, k)) / (2.0 * dx)
3: end do
```