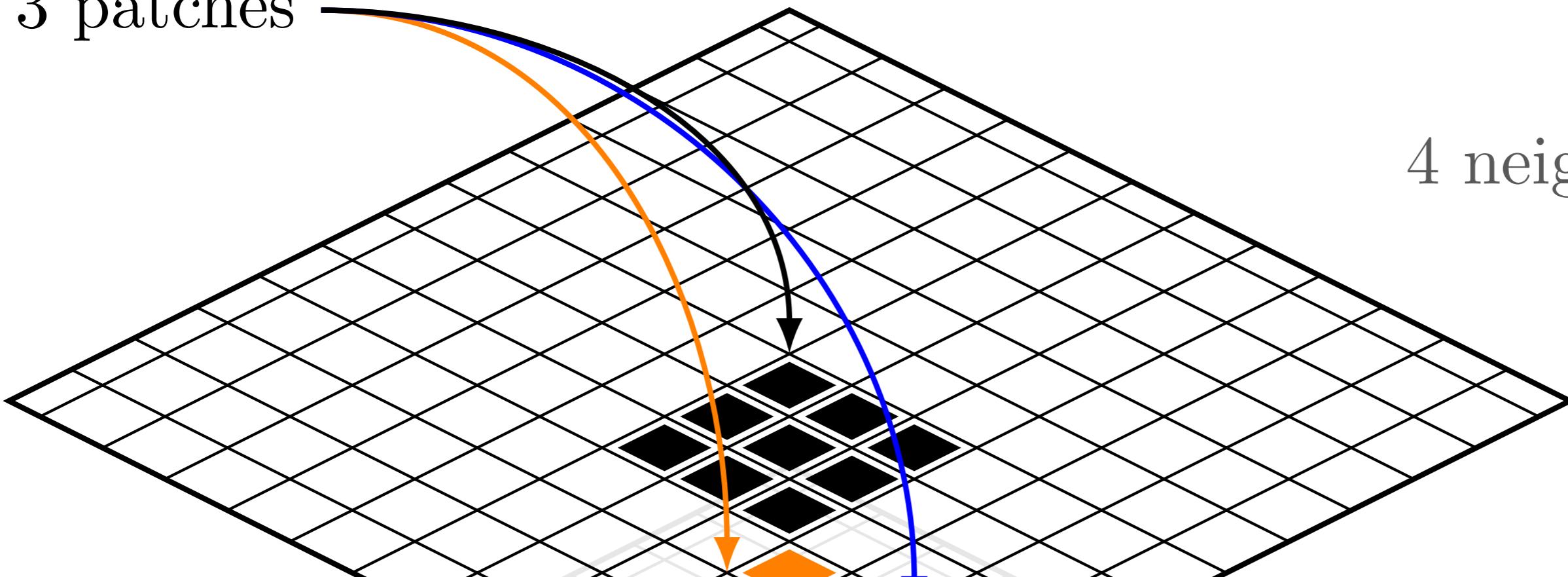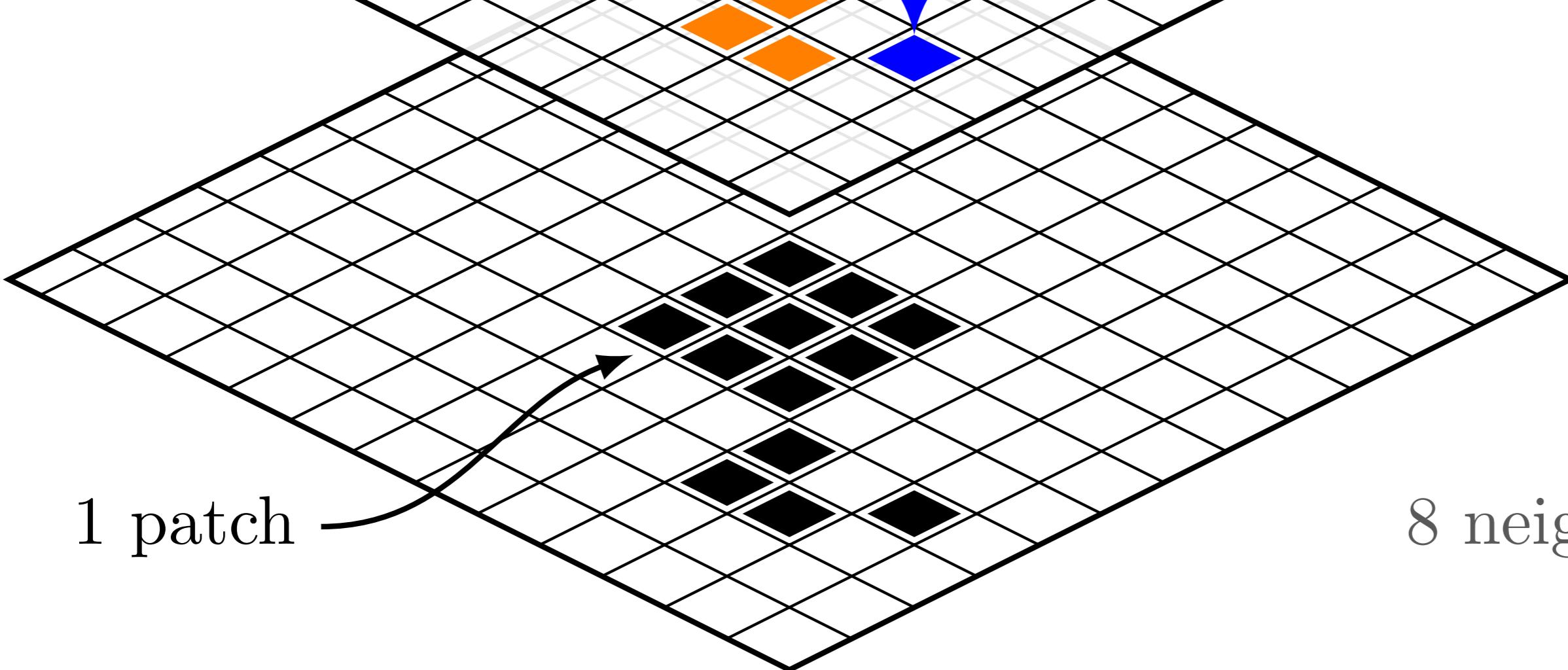3 patches

4 neighbourhood rule

1 patch

8 neighbourhood rule