Crossover operators for the TSP
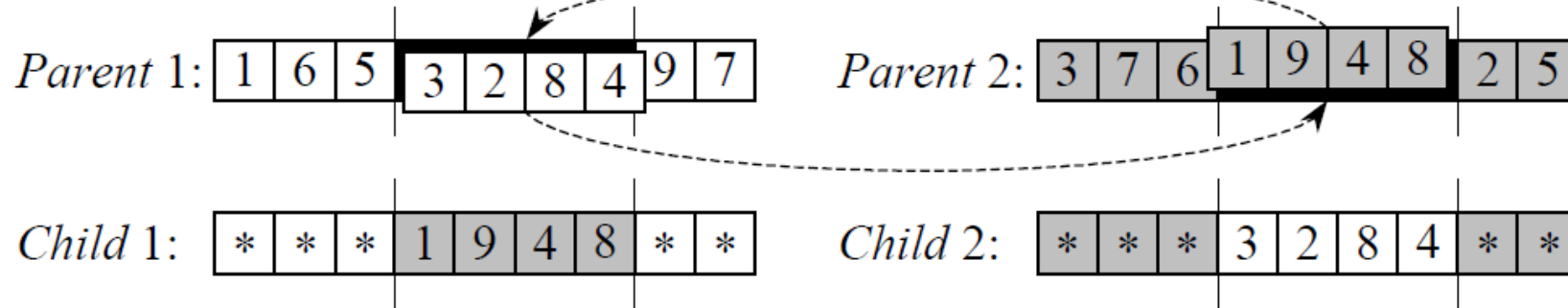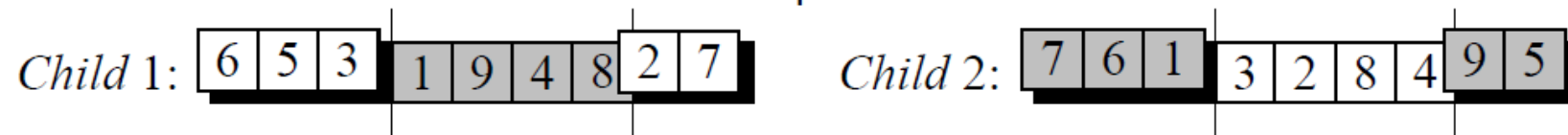
Mutation operators for the TSP

Reciprocal exchange

```
✖        ✖
┌─┬─┬─┬─┬─┬─┬─┬─┬─┐
│1│6│5│3│2│8│4│9│7│
└─┴─┴─┴─┴─┴─┴─┴─┴─┘
```
(a) original chromosomes

Inversion

```
  │         │
┌─┬─┬─┬─┬─┬─┬─┬─┬─┐
│1│6│5│3│2│8│4│9│7│
└─┴─┴─┴─┴─┴─┴─┴─┴─┘
```

```
┌─┬─┬─┬─┬─┬─┬─┬─┬─┐
│1│6│8│3│2│5│4│9│7│
└─┴─┴─┴─┴─┴─┴─┴─┴─┘
```
(b) mutated chromosomes

```
  │         │
┌─┬─┬─┬─┬─┬─┬─┬─┬─┐
│1│2│3│5│6│8│4│9│7│
└─┴─┴─┴─┴─┴─┴─┴─┴─┘
```