## Linear fitness function

## Population rate

Phrase: To be or not to be

| Total population Mutation rate |    | Number of generations until phrase solved | Total time in seconds until phrase solved |  |
|--------------------------------|----|---|---|--|
| 150                            | 1% | 812                                       | 8,50                                      |  |
| 300                            | 1% | 238                                       | 5,3                                       |  |
| 1 000                          | 1% | 28  | 1,8                                       |  |
| 10 000                         | 1% | 20  | 11,5                                      |  |

## **Mutation rate**

Phrase: To be or not to be

| otal population Mutation rate |     | Number of generations until phrase solved | Total time in seconds until phrase solved |  |
|-------------------------------|-----|---|---|--|
| 1000                          | 0%  | 24 or never?                              | 1,5 or never?                             |  |
| 1000                          | 1%  | 29  | 1,7                                       |  |
| 1000                          | 2%  | 33  | 1,9                                       |  |
| 1000                          | 10% | never?                                    | never?                                    |  |