

Table showing optimal results from Blind and Heuristic searches. In all cases, the Heuristic search reduces the nodes expanded.

| Problem   | Cost | Optimal Paths         | Blind Expanded Nodes | Heuristic Expanded Nodes | Difference |
|-----------|------|-----------------------|----------------------|--------------------------|------------|
| Example 1 | 32   | [a, e, d, b, c, a]    | 75                   | <b>56</b>                | 19         |
|           |      | [a, c, b, d, e, a]    | 75                   | 59                       |            |
| Example 2 | 46   | [a, d, b, c, e, a]    | 79                   | <b>60</b>                | 18         |
|           |      | [a, e, c, b, d, a]    | <b>78</b>            | 65                       |            |
| Example 3 | 23   | [a, d, e, b, c, a]    | 79                   | <b>61</b>                | 17         |
|           |      | [a, c, b, e, d, a]    | <b>78</b>            | 62                       |            |
| Example 4 | 76   | [a, c, b, f, d, e, a] | <b>187</b>           | <b>157</b>               | 30         |
|           |      | [a, e, d, f, b, c, a] | 189                  | 161                      |            |
| Example 5 | 64   | [a, d, b, c, a]       | <b>32</b>            | <b>28</b>                | 4          |
|           |      | [a, c, b, d, a]       | 33                   | 29                       |            |

More clear table:

| Problem   | Blind | Heuristic |
|-----------|-------|-----------|
| Example 1 | 75    | 56        |
| Example 2 | 78    | 60        |
| Example 3 | 78    | 61        |
| Example 4 | 187   | 157       |
| Example 5 | 32    | 28        |