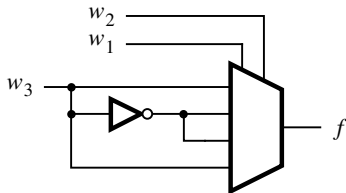


| w_1 | w_2 | w_3 | f | |
|-------|-------|-------|-----|---------------|
| 0 | 0 | 0 | 0 | } w_3 |
| 0 | 0 | 1 | 1 | |
| 0 | 1 | 0 | 1 | } \bar{w}_3 |
| 0 | 1 | 1 | 0 | |
| 1 | 0 | 0 | 1 | } \bar{w}_3 |
| 1 | 0 | 1 | 0 | |
| 1 | 1 | 0 | 0 | } w_3 |
| 1 | 1 | 1 | 1 | |

(a) Truth table



(b) Circuit

Figure 4.9 Three-input XOR implemented with a 4-to-1 multiplexer.