|                   | Open Door                   | Close Door  | Cook            | Timer Ticks       | Timer Runs Out                       |
|-------------------|-----------------------------|---|-----------------|-------------------|--------------------------------------|
| Idle; Door Closed | Idle; Door Open             | Idle; Door Open   Idle; Door Closed   Cooking   | Cooking         | Idle; Door Closed | dle; Door Closed   Idle; Door Closed |
| Idle; Door Open   | Idle; Door Open             | Idle; Door Open   Idle; Door Closed   Idle; Door Open   Idle; Door Open   Idle; Door Open | Idle; Door Open | Idle; Door Open   | Idle; Door Open                      |
| Cooking           | Interrupted                 | Cooking   | Cooking         | Cooking           | Completed                            |
| Interrupted       | Interrupted                 | Idle; Door Closed   Interrupted   | Interrupted     | Interrupted       | Interrupted                          |
| Completed         | Idle; Door Open   Completed | Completed   | Cooking         | Completed         | Completed                            |

Figure 10.1: Transition table for the microwave. The cells in the first column (other than the blank cell in the top row) list the states. The column headers name the events. The remaining cells represent state transitions in response to events. For example, if the current state is Idle; Door Closed (the left-most column in the second row) and the event is Cook (the fourth column), the state changes to Cooking. Also note that in some states, for certain events, the next state is the same as the current state.