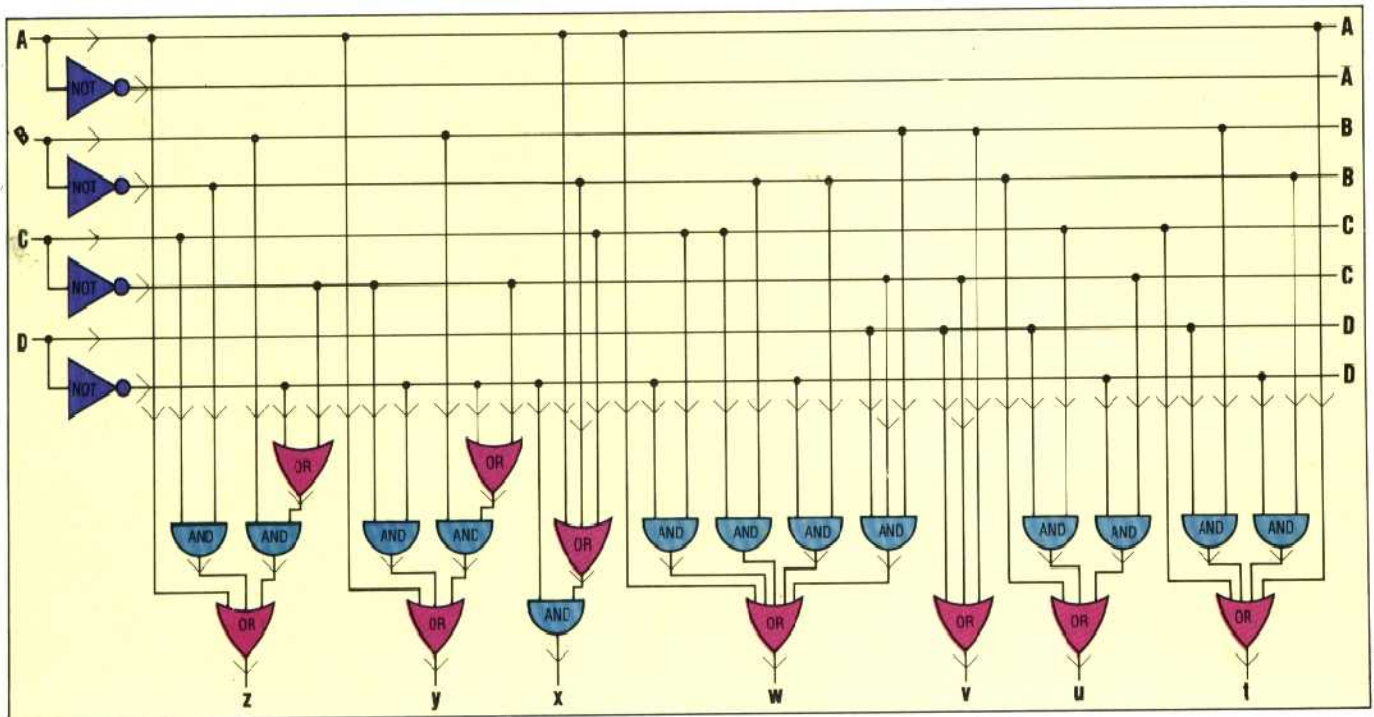
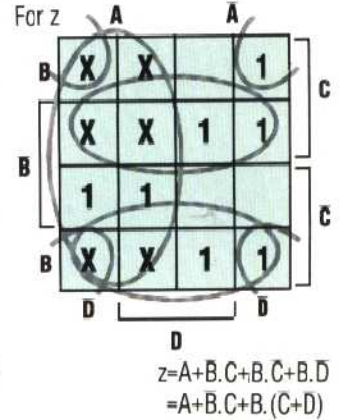
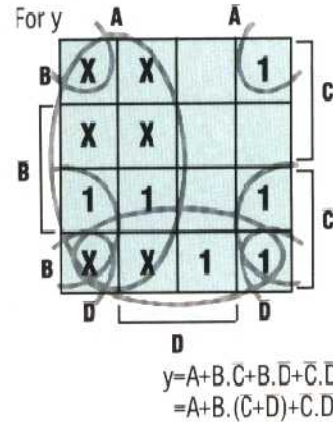
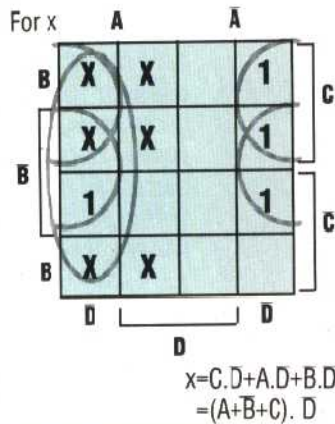
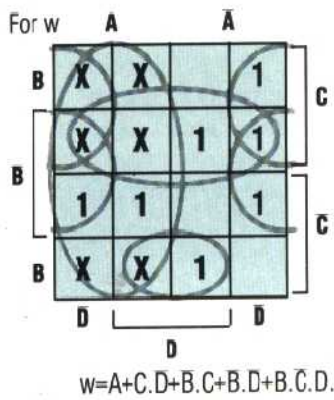
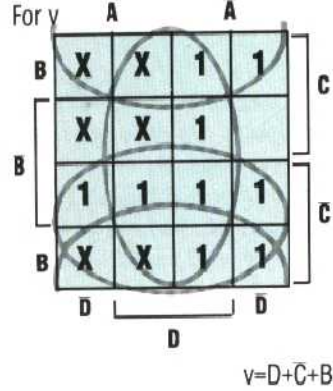
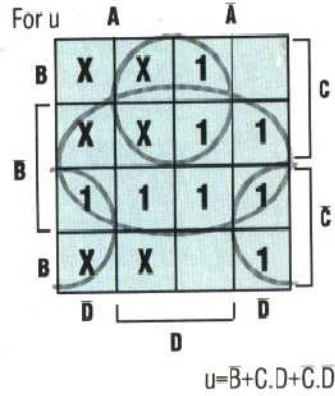
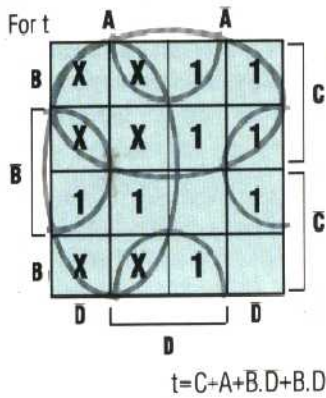




Bar Codes

From these diagrams we can determine which bars need to be activated to form each digit. The simple digit, '1', needs only the bars labelled 'u' and 'v' to be switched on. The truth table on the opposite page gives the outputs needed for all the digits



The circuit we have designed operates one display cell only. As most circuits of this type have eight or even 10 units, it would seem that it is necessary to duplicate the circuit for each cell. However, it is possible to share one converter between all the displays by a process known as *multiplexing*. This

switches each unit in the display on and off in sequence so that at any one time there is only one unit accepting information from the converter circuit. Because this happens at high speed, the display appears steady and gives no trace of the rapid switching that is occurring.