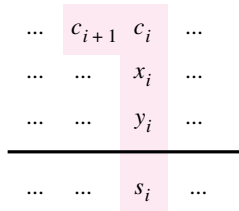


Generated carries  $\longrightarrow$  1 1 1 0

$$\begin{array}{rcccccc}
 X = x_4 x_3 x_2 x_1 x_0 & 0 & 1 & 1 & 1 & 1 & (15)_{10} \\
 + Y = y_4 y_3 y_2 y_1 y_0 & + 0 & 1 & 0 & 1 & 0 & + (10)_{10} \\
 \hline
 S = s_4 s_3 s_2 s_1 s_0 & 1 & 1 & 0 & 0 & 1 & (25)_{10}
 \end{array}$$

(a) An example of addition



(b) Bit position  $i$

**Figure 3.2** Addition of multibit numbers.