

$$\begin{array}{r}
 x \\
 + y \\
 \hline
 c \quad s
 \end{array}
 \qquad
 \begin{array}{r}
 0 \\
 + 0 \\
 \hline
 0 \quad 0
 \end{array}
 \qquad
 \begin{array}{r}
 0 \\
 + 1 \\
 \hline
 0 \quad 1
 \end{array}
 \qquad
 \begin{array}{r}
 1 \\
 + 0 \\
 \hline
 0 \quad 1
 \end{array}
 \qquad
 \begin{array}{r}
 1 \\
 + 1 \\
 \hline
 1 \quad 0
 \end{array}$$

Carry  $\xrightarrow{\quad}$   $\uparrow$   $\uparrow$   $\xrightarrow{\quad}$  Sum

(a) The four possible cases

		Carry	Sum
$x$	$y$	$c$	$s$
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

(b) Truth table