$$\begin{array}{r}
1100 \\
\times 1101 \\
\hline
12 \\
\hline
1100 \\
\times 13 \\
\hline
36 \\
\hline
1100 \\
\hline
12 \\
\hline
156 \\
\hline
10011100 \\
\hline
(a) \\
(b)
\end{array}$$

Figure 5.8 The elementary-school algorithm for multiplying two integers, in (a) decimal and (b) binary representation.