

Find the binary multiplication of 101 and 11,

$$\begin{array}{r} 101 \\ \times 11 \\ \hline \end{array}$$

First we multiply 101 by 1, which produces 101. Then we put a 0 as a placeholder as we would in decimal multiplication, and multiply 101 by 1, which produces 101.

$$\begin{array}{r} 101 \\ \times 11 \\ \hline 101 \\ 1010 \end{array} \rightarrow \text{Place holder}$$

The next step is to add. The result(s) from our previous step indicates that we must add 101 and 1010, the sum of which is 1111.

$$\begin{array}{r} 101 \\ \times 11 \\ \hline 101 \\ 1010 \\ \hline 1111 \end{array}$$