

The Add-on Strategy.

Joe did not know the answer to $3 \times 7 = ?$ Joe DID know what 3×5 was. So he drew an array for 3×5 .

$$\begin{array}{r} \text{x} \quad \text{5} \\ \text{X X X X X X X} \\ \text{3} \quad \text{X X X X X X X} \\ \quad \text{X X X X X X X} \\ \quad \quad \text{15 + 6 = 21} \end{array}$$

He knew that his array was missing two groups of three from 3×7 , so he added those onto the end of the array. Then Joe added the 15 that he had from 3×5 and the missing six from 3×7 . He got a sum of 21. Joe now knew that $3 \times 7 = 21$.