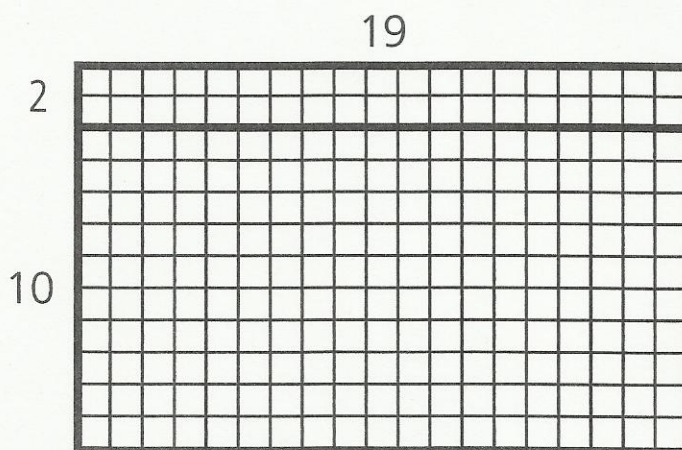


Explore Multiplying by 2-Digit Numbers

An array can help you multiply.

Find 12×19 . Think: $12 = 10 + 2$

$$\begin{array}{r}
 19 \\
 \times 12 \\
 \hline
 38 \quad \leftarrow 2 \times 19 \\
 + 190 \quad \leftarrow 10 \times 19 \\
 \hline
 228
 \end{array}$$

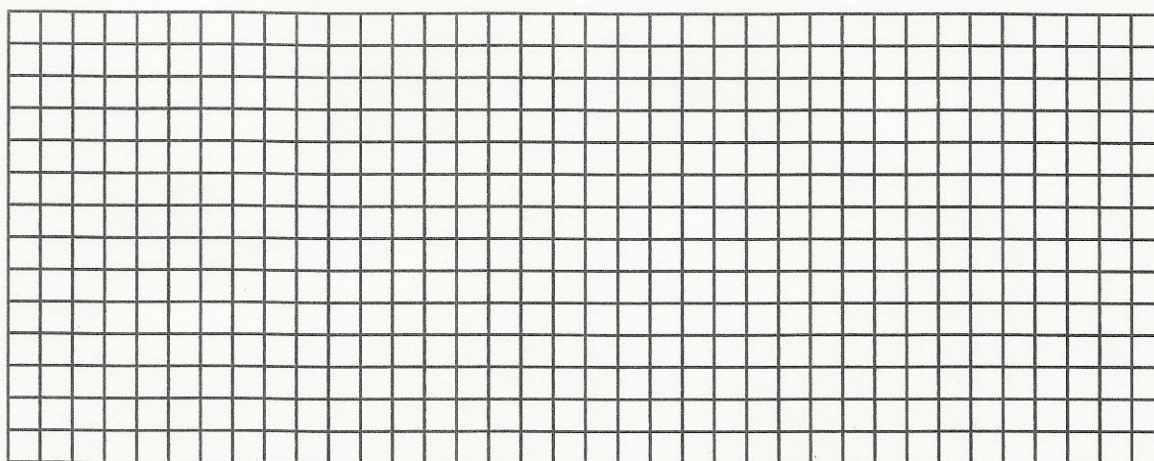


$$38 + 190 = 228$$

Find each product. Draw an array diagram to help you.

1. $14 \times 15 = \underline{\hspace{2cm}}$

2. $11 \times 19 = \underline{\hspace{2cm}}$



Multiply.

3. $\begin{array}{r} 28 \\ \times 14 \\ \hline \end{array}$

4. $\begin{array}{r} 35 \\ \times 26 \\ \hline \end{array}$

5. $\begin{array}{r} 42 \\ \times 33 \\ \hline \end{array}$

6. $\begin{array}{r} 49 \\ \times 27 \\ \hline \end{array}$

7. $\begin{array}{r} 32 \\ \times 18 \\ \hline \end{array}$

8. $\begin{array}{r} 18 \\ \times 41 \\ \hline \end{array}$

9. $\begin{array}{r} 23 \\ \times 17 \\ \hline \end{array}$

10. $\begin{array}{r} 24 \\ \times 52 \\ \hline \end{array}$

11. $\begin{array}{r} 45 \\ \times 28 \\ \hline \end{array}$

12. $\begin{array}{r} 27 \\ \times 27 \\ \hline \end{array}$

13. $32 \times 21 = \underline{\hspace{2cm}}$

14. $41 \times 32 = \underline{\hspace{2cm}}$

15. $26 \times 17 = \underline{\hspace{2cm}}$