

Maths Mastery

**Multiplication
Formal Methods**



Teacher Information

Click one of the buttons at the bottom of the relevant slides to show the regrouped numbers in different places.

Eg.

$$\begin{array}{r} 3168 \\ \times 4 \\ \hline 12672 \\ \hline \end{array}$$

2 3
2 3

After you show the answers, there will be new buttons for you to decide which regrouping method you would like to show.

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Formal Multiplication

$$\begin{array}{r} 452 \\ \times 3 \\ \hline 12156 \\ \hline \end{array}$$

50 x 3 = 150, but the hundred must be regrouped to add to the 400 x 3. The answer is 1356.

$$\begin{array}{r} 2084 \\ \times 7 \\ \hline 14588 \\ \hline \end{array}$$

correct

$$\begin{array}{r} 3168 \\ \times 4 \\ \hline 12442 \\ \hline \end{array}$$

The regrouped 30 and 200 the 4's must be added. The answer is 12672.

Hide
Answers

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Long Multiplication

The 2000 has not been added to the 28 000.

The 10 000 from 13 000 has not been added to the 100 000. Note if the 28 064 was 30 064, there would be no regrouped 10 000.

$$\begin{array}{r} 4295 \\ \times 27 \\ \hline 28064 \\ 1 \\ 85900 \\ \hline 1013965 \\ 2 \\ \end{array}$$

$5 \times 7 = 35$

The answer is 115 965

Hide
Answers

Hide

Hide

Missing Numbers

Calculate the missing number using formal methods.

$$\begin{array}{r} \underline{671} \\ \times \quad 4 \\ \hline 2684 \\ \hline \end{array}$$

$$\begin{array}{r} \underline{9034} \\ \times \quad 5 \\ \hline 45170 \\ \hline \end{array}$$

$$\begin{array}{r} \underline{4936} \\ \times \quad \underline{9} \\ \hline 44\underline{4}24 \\ \hline \end{array}$$

Write some missing number multiplication calculations for a partner to solve.

Hide
Answers

Missing Numbers

Complete these calculations:

$$\begin{array}{r} \underline{3167} \\ \times \quad 13 \\ \hline \end{array}$$

$$9501$$

$$\begin{array}{r} \underline{31670} \\ \hline \underline{41171} \end{array}$$

$$\begin{array}{r} \underline{7205} \\ \times \quad \underline{29} \\ \hline \end{array}$$

$$64845$$

$$\begin{array}{r} \underline{144100} \\ \hline \underline{208945} \end{array}$$

$$\begin{array}{r} \underline{6614} \\ \times \quad \underline{73} \\ \hline \end{array}$$

$$19842$$

$$\begin{array}{r} \underline{462980} \\ \hline \underline{482822} \end{array}$$

Hide
Answers

Write some missing number long multiplication calculations for a partner to solve.

Missing Numbers

$$\begin{array}{r} 2364 \\ \times 4 \\ \hline 9456 \end{array}$$

$$\begin{array}{r} 4368 \\ \times 2 \\ \hline 8736 \end{array}$$

$$\begin{array}{r} 1368 \\ \times 2 \\ \hline 2736 \end{array}$$

$$\begin{array}{r} 9366 \\ \times 1 \\ \hline 9366 \end{array}$$

$$\begin{array}{r} 1364 \\ \times 4 \\ \hline 5456 \end{array}$$

$$\begin{array}{r} 3368 \\ \times 2 \\ \hline 6736 \end{array}$$

$$\begin{array}{r} 1361 \\ \times 6 \\ \hline 8166 \end{array}$$

This can be repeated with any number of 1000s, so 8 more.

Hide
Answers

Write a missing number multiplication calculation with several solutions for a partner to solve.

