

MULTIPLICATION

Example: 243×4

1. SET UP

Write the larger number on top.
Line up the ones place.

$$\begin{array}{r} 243 \\ \times 4 \\ \hline \end{array}$$

2. MULTIPLY ONES

Multiply the ones.
 $4 \times 3 = 12$

$$\begin{array}{r} 243 \\ \times 4 \\ \hline \end{array}$$

3. REGROUP

Write 2 in the ones place.
Carry the 1 to the tens place.

$$\begin{array}{r} 1 \\ 243 \\ \times 4 \\ \hline 2 \end{array}$$

4. MULTIPLY TENS

4×4 tens = 16 tens.
Add the carried 1: $16 + 1 = 17$.

$$\begin{array}{r} 1 \\ 243 \\ \times 4 \\ \hline 72 \end{array}$$

5. REGROUP AGAIN

Write 7 in the tens place.
Carry the 1 to the hundreds place.

$$\begin{array}{r} 11 \\ 243 \\ \times 4 \\ \hline 72 \end{array}$$

6. MULTIPLY HUNDREDS

4×2 hundreds = 8 hundreds.
Add the carried 1: $8 + 1 = 9$.

$$\begin{array}{r} 11 \\ 243 \\ \times 4 \\ \hline 972 \end{array}$$

7. CHECK

Estimate to see if your answer makes sense.
243 is about 250. $250 \times 4 = 1,000$.
972 is reasonable.

$$243 \times 4 = 972$$

Mock-up: left rail is reserved for punched holes + pipe cleaner + sliding bead.