

# 3×1 Problems

Example: 
$$\begin{array}{r} 456 \\ \times 7 \\ \hline \end{array}$$

**STEP 1**

$$\begin{array}{r} 456 \\ \times 7 \\ \hline 2 \end{array}$$

- ✓ Multiply 7 by 6 ( $7 \times 6 = 42$ )
- ✓ Put the 2 (the digit of the answer that is in the 1's place) on the bottom and carry the 4 (the 10's place) on top of the 5.

**STEP 2**

$$\begin{array}{r} 34 \\ 456 \\ \times 7 \\ \hline 92 \end{array}$$

- ✓ Multiply 7 by 5 ( $7 \times 5 = 35$ )
- ✓ Add the 4 you carried from Step 1 ( $35 + 4 = 39$ )
- ✓ Put the 9 (1's place of answer) on the bottom and the 3 (10's place) on top of the 4.

**STEP 3**

$$\begin{array}{r} 34 \\ 456 \\ \times 7 \\ \hline 3192 \end{array}$$

- ✓ Multiply 7 by 4 ( $7 \times 4 = 28$ )
- ✓ Add the 3 you carried from Step 2 ( $28 + 3 = 31$ )
- ✓ Because there's no more multiplying to do, you put the whole answer (31) on the bottom. You're done!
- ✓  $456 \times 7 = 3,192$

H	T	O	
4	5	6	
	×	7	
	4	2	←
3	5	0	←
2	8	0	←
3	1	9	2

**ANOTHER WAY TO DO IT:** MULTIPLY AND LIST THE PARTIAL PRODUCTS, INSTEAD OF CARRYING.

- ← Multiply the 1's
- ← Multiply the 10's
- ← Multiply the 100's
- ← Add the partial products

$$\begin{array}{r} (1) \quad 285 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} (2) \quad 482 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} (3) \quad 679 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} (4) \quad 888 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} (5) \quad 864 \\ \times 7 \\ \hline \end{array}$$

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Different, but I bet you can figure out how to do them!

$$\begin{array}{r} (6) \quad 1986 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} (7) \quad 24,680 \\ \times 9 \\ \hline \end{array}$$