Three-Digit Subtraction, Part 1 ANSWERS

Subtract multi-digit numbers using different strategies.	To solve problems using expanded notation subtraction, change numbers to expanded notation, line them up horizontally, subtract each column from left to right, and then add the differences. Regroup the values as necessary.	To solve problems using standard algorithm subtraction, stack and line up the digits based on their place value, then subtract one place value at a time from right to left. Regroup the values as necessary.
Equation 475 - 376	**Expanded Notation** $\begin{array}{r} 300 \quad 160 \quad 15 \\ 400 + 70 + 5 \\ - 300 + 70 + 6 \\ \hline 0 + 90 + 9 \end{array}$ $\begin{array}{r} 0 \\ 90 \\ + \quad 9 \\ \hline 99 \end{array}$	**Standard Algorithm** $\begin{array}{r} 16 \\ 3\ 6\ 15 \\ 475 \\ - 376 \\ \hline 99 \end{array}$

Directions: Solve the equations using both expanded notation and standard algorithm subtraction.

Equation	Expanded Notation	Standard Algorithm
1. 735 - 382	$\begin{array}{r} 600 \quad 130 \\ 700 + 30 + 5 \\ - 300 + 80 + 2 \\ \hline 300 + 50 + 3 \end{array}$ $\begin{array}{r} 300 \\ 50 \\ + \quad 3 \\ \hline 353 \end{array}$ Answer = 353	$\begin{array}{r} 6\ 13 \\ 735 \\ - 382 \\ \hline 353 \end{array}$ ◯ 353
2. 607 - 295	$\begin{array}{r} 500 \quad 100 \\ 600 + 0 + 7 \\ - 200 + 90 + 5 \\ \hline 300 + 10 + 2 \end{array}$ $\begin{array}{r} 300 \\ 10 \\ + \quad 2 \\ \hline 312 \end{array}$ Answer = 312	$\begin{array}{r} 5\ 10 \\ 607 \\ - 295 \\ \hline 312 \end{array}$ ◯ 312
3. 976 - 475	$\begin{array}{r} 900 + 70 + 6 \\ - 400 + 70 + 5 \\ \hline 500 + 0 + 1 \end{array}$ $\begin{array}{r} 500 \\ 0 \\ + \quad 1 \\ \hline 501 \end{array}$ Answer = 501	$\begin{array}{r} 976 \\ - 475 \\ \hline 501 \end{array}$ ◯ 501

Equation	Expanded Notation	Standard Algorithm
4. 253 - 171	$$\begin{array}{r} \overset{100}{\cancel{200}} + \overset{150}{\cancel{50}} + 3 \\ - \quad 100 + 70 + 1 \\ \hline 0 + 80 + 2 \end{array} \qquad \begin{array}{r} 0 \\ 80 \\ + \ 2 \\ \hline 82 \end{array}$$ Answer = 82	$$\begin{array}{r} \overset{1\ \ 15}{\cancel{2\cancel{5}3}} \\ - \ 171 \\ \hline 82 \end{array}$$ (82)
5. 723 - 589	$$\begin{array}{r} \overset{600}{\cancel{700}} + \overset{\overset{110}{\cancel{10}}}{\cancel{20}} + \overset{13}{\cancel{3}} \\ - \quad 500 + 80 + 9 \\ \hline 100 + 30 + 4 \end{array} \qquad \begin{array}{r} 100 \\ 30 \\ + \ 4 \\ \hline 134 \end{array}$$ Answer = 134	$$\begin{array}{r} \overset{11}{}\ \\ \overset{6\ \cancel{1}\ 13}{\cancel{7\cancel{2}3}} \\ - \ 589 \\ \hline 134 \end{array}$$ (134)
6. 587 - 225	$$\begin{array}{r} 500 + 80 + 7 \\ - \ 200 + 20 + 5 \\ \hline 300 + 60 + 2 \end{array} \qquad \begin{array}{r} 300 \\ 60 \\ + \ 2 \\ \hline 362 \end{array}$$ Answer = 362	$$\begin{array}{r} 587 \\ - \ 225 \\ \hline 362 \end{array}$$ (362)
7. 171 - 129	$$\begin{array}{r} 100 + \overset{60}{\cancel{70}} + \overset{11}{\cancel{1}} \\ - \ 100 + 20 + 9 \\ \hline 0 + 40 + 2 \end{array} \qquad \begin{array}{r} 0 \\ 40 \\ + \ 2 \\ \hline 42 \end{array}$$ Answer = 42	$$\begin{array}{r} \overset{6\ 11}{17\cancel{1}} \\ - \ 129 \\ \hline 42 \end{array}$$ (42)