

ANSWERS**Three-Digit Addition: Part 2**

Add multi-digit numbers using different strategies.

To solve problems using **expanded notation addition**, change all the numbers to expanded notation, line them up horizontally, add each column, and then add the sums.

To solve problems using **standard algorithm addition**, stack and line up the addends based on their place value, then add up one place value at a time working from right to left. Don't forget to carryover to regroup the values.

Equation

$$376 + 475$$

Expanded Notation

$$\begin{array}{r} 300 + 70 + 6 \\ 400 + 70 + 5 \\ \hline 700 + 140 + 11 \\ \hline 851 \end{array}$$

Standard Algorithm

$$\begin{array}{r} & 1 & 1 \\ & 3 & 7 & 6 \\ + & 4 & 7 & 5 \\ \hline & 8 & 5 & 1 \end{array}$$

Directions: Solve the equations using both Expanded Notation and Standard Algorithm addition.

<p><u>Equation</u></p> <p>1. $532 + 392$</p>	<p><u>Expanded Notation</u></p> $\begin{array}{r} 500 + 30 + 2 \\ 300 + 90 + 2 \\ \hline 800 + 120 + 4 \\ \hline 924 \end{array}$ <p>Answer: 924</p>	<p><u>Standard Algorithm</u></p> $\begin{array}{r} & 1 \\ & 5 & 3 & 2 \\ + & 3 & 9 & 2 \\ \hline & 9 & 2 & 4 \end{array}$ <p>Answer: 924</p>
<p><u>Equation</u></p> <p>2. $190 + 390$</p>	<p><u>Expanded Notation</u></p> $\begin{array}{r} 100 + 90 + 0 \\ 300 + 90 + 0 \\ \hline 400 + 180 + 0 \\ \hline 580 \end{array}$ <p>Answer: 580</p>	<p><u>Standard Algorithm</u></p> $\begin{array}{r} & 1 \\ & 1 & 9 & 0 \\ + & 3 & 9 & 0 \\ \hline & 5 & 8 & 0 \end{array}$ <p>Answer: 580</p>
<p><u>Equation</u></p> <p>3. $276 + 375$</p>	<p><u>Expanded Notation</u></p> $\begin{array}{r} 200 + 70 + 6 \\ 300 + 70 + 5 \\ \hline 500 + 140 + 11 \\ \hline 651 \end{array}$ <p>Answer: 651</p>	<p><u>Standard Algorithm</u></p> $\begin{array}{r} & 1 & 1 \\ & 2 & 7 & 6 \\ + & 3 & 7 & 5 \\ \hline & 6 & 5 & 1 \end{array}$ <p>Answer: 651</p>