Addition Strategies

Adding left to right (expanded notation)
256 + 687
200 + 600 = 800
50 + 80 = 130
6 + 7 = 13
800 + 130 + 13 = 943
This algorithm is related to the traditional "carrying" algorithm, which is also a form of adding by place, except that traditionally we were taught to start with the ones rather than the largest place.*

Starting with ones of the numbers, then adding on the other number in parts, often (but not always) starting with the largest place.
256 + 687
256 + 600 = 856
856 + 80 = 936
936 + 7 = 943

Round one or more of the addends to numbers that are easier to work with, then compensate.
256 + 687
256 + 700 = 956
956 – 13 = 943

Transform the entire problem to an equivalent problem that is easier to solve.
256 + 687
256 + 687 = (256 – 13) + (687 + 13)
243 + 700 = 943

Please note that students may use larger numbers or chunks once they are more confident with their understanding with number. Also, the recording of the numbers is to **explain** how they solved the problem and can look tedious. Many of the steps can be done **mentally** with some keeping track on paper if necessary.

It is important that students eventually learn to read all common notations, including both vertical and horizontal notations for addition, subtraction, and multiplication, as well as the various notations for division. However, they need to be secure enough to interpret these notations correctly while still relying on their own mathematically sound procedures to solve problems notated in any of these ways.*

For example:
2 + 4 = 6   32 – 27 = 5   5 = 32 - 27

$$\begin{array}{r} 2 \\ +4 \\ \hline 6 \end{array}$$
$$\begin{array}{r} 32 \\ -\ 27 \\ \hline 5 \end{array}$$
$$\begin{array}{r} 12 \\ \times\ 7 \\ \hline 84 \end{array}$$
12 x 7 = 84

$$\begin{array}{r} 6 \\ \hline 4)24 \end{array}$$

24 ÷ 4 = 6   24/4 = 6

*Relearning to Teach Arithmetic, Susan Jo Russell. 1999.
Everett Public Schools, 2005