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Module 2 Whole Number Operations
Lesson 1 Large Numbers: Addition

## Lesson Notes

 2.1
## Lesson Objective

- Develop and use a variety of algorithms with computational fluency to perform whole number operations using addition (up to five-digit numbers), including real-world problems.


## Subtopic 1 Partial Sums Method for Addition

Partial Sums Method for Addition

- Add one place value column at a time.
- Write each partial sum.
- Add all the partial sums to find the total sum.

Use the Partial Sums Method to solve.
Riley drove 2,289 miles last week and 1,327 miles this week. How many miles did Riley drive both weeks?

| 2,289 |
| ---: |
| $+\quad 1,327$ |
| 3,000 |
| Riley drove 3,616 |
| $+\quad 100$ |

One book has 1,546 pages. Another book has 976 pages. How many pages are in both books?

$$
\begin{array}{r}
1,546 \\
+\quad 976 \\
\hline 1,000 \\
1,400 \\
+\quad 110 \\
+\quad 12 \\
\hline 2,522
\end{array}
$$

## Subtopic 2 Column Addition Method for Addition

Column Addition Method for Addition

- Add one place value column at a time.
- Write each place value answer.
- If necessary, adjust each place value answer one column at a time.

Use the Column Addition Method to solve.

Josh has a score of 12,725 points on a quiz show. He answers a problem correctly to earn an additional 8,290 points. What is Josh's new score?

|  | 1 | 2 | 7 | 2 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| + |  | 8 | 2 | 9 | 0 |
|  | 1 | 10 | 9 | 11 | 5 |
|  | 1 | 10 | 10 | 1 | 5 |
|  | 1 | 11 | 0 | 1 | 5 |
|  | 2 | 1 | 0 | 1 | 5 |

Josh's new score: 21,015
A bakery sold 876 doughnuts on Saturday and 659 doughnuts on Sunday. How many doughnuts did the bakery sell on both days?

|  | 8 | 7 | 6 |
| :---: | :---: | :---: | :---: |
| + | 6 | 5 | 9 |
|  | 14 | 12 | 15 |
|  | 14 | 13 | $\mathbf{5}$ |
|  | 15 | 3 | 5 |
| 1 | 5 | 3 | 5 |

## 1,535 doughnuts

## Subtopic 3 Standard Addition Model

Solve.

$$
6 \quad \begin{array}{r}
587+394 \\
11 \\
\mathbf{5 8 7} \\
+\mathbf{3 9 4} \\
\hline
\end{array}
$$

