NAME_____

Module 2   **Whole Number Operations**
Lesson 1   **Large Numbers: Addition**

Set 1

1   Find 767 + 458 using the Partial Sums Method and using the Column Addition Method. Explain why each method works.

2   Compare and contrast the Standard Addition Method and the Partial Sums Method.

3   Compare and contrast the Standard Addition Method and the Column Addition Method.

1.   **Partial Sums Method**   **Column Addition Method**

<div>

```
    767
+   458
  1,100
    110
+    15
  1,225
```

</div>

	7	6	7
+	4	5	8
	11	11	15
	11	12	5
	12	2	5
1	2	2	5

The Partial Sums Method works because the expanded forms of the numbers are being added.

The Column Addition Method works because one place value column is added at a time and then regrouping as needed.

2. In the Partial Sums Method, one place value column is added at a time. Then, the partial sums are added. There is not as much regrouping as in the Standard Method. In the Standard Method, one place value is added at a time and is regrouped if necessary as each place value is added.

Partial Sums   Standard

```
                        1 1 1
    767                  767
+   458              +   458
  1,100                1,225
    110
+    15
  1,225
```

3. In the Column Addition Method, one column is added at a time. Then, go back and regroup one column at a time. In the Standard Method, regroup as each column is added one at a time.

Column Addition   Standard

```
                        1 1 1
                         767
                     +   458
                       1,225
```

	7	6	7
+	4	5	8
	11	11	15
	11	12	5
	12	2	5
1	2	2	5

1,225