

Advanced Addition

Addition is the process of making a number or value **larger** by combining numbers. It is important to remember that the sum of two numbers is usually larger than the two added numbers. Think of all the ways you add in your life!

Vocabulary

| | |
|-------------------------------|---|
| Addition | Combining one or more quantities together to find a (larger) sum. |
| Regrouping / Composing | Grouping ten of a smaller place value and changing it into one of a larger place value. EX: Ten tens composes into one hundred. |

Adding without composing

$$584 + 312 = \underline{\hspace{2cm}}$$

| | | |
|-----|----|---|
| 500 | 80 | 4 |
| 300 | 10 | 1 |

$$\underline{\hspace{2cm}} = 394 + 179$$

Adding with composing in the 1's

$$324 + 558 = \underline{\hspace{2cm}}$$

| | | |
|-----|----|------|
| 300 | 20 | 4 |
| 500 | 50 | 8 |
| 800 | 80 | (1)2 |

10 (arrow from 20 to 100)

$$297 + 412 = \underline{\hspace{2cm}}$$

Adding with composing in the 10's

$$128 + 790 = \underline{\hspace{2cm}}$$

| | | |
|-----|-------|---|
| 100 | 20 | 8 |
| 100 | 90 | 0 |
| 700 | (1)10 | 8 |
| 900 | | |

100 (arrow from 20 to 100)

$$\underline{\hspace{2cm}} = 538 + 222$$

Adding with composing in the 1's and the 10's

$$479 + 336 = \underline{\hspace{2cm}}$$

| | | |
|-----|-------|------|
| 400 | 70 | 9 |
| 300 | 30 | 6 |
| 800 | (1)10 | (1)5 |

100 (arrow from 70 to 100), *10* (arrow from 9 to 10)

$$333 + 567 = \underline{\hspace{2cm}}$$

Advanced Subtraction

Subtraction is the process of making a number or value **smaller** by removing a quantity from a number. It is important to remember that in third grade, the smaller number is subtracted away from the larger number. Think of all the ways you subtract in your life!

Vocabulary

| | |
|--------------------------------|--|
| Subtraction | Removing an amount from a given quantity to find a (smaller) difference. |
| <i>Borrowing / Decomposing</i> | Breaking down <u>one</u> of a larger place value and changing it into <u>ten</u> of a smaller place value. EX. One ten decomposes into ten ones. |

Subtracting without decomposing

$$642 - 420 = \underline{\hspace{2cm}}$$

| | | |
|-----|----|---|
| 600 | 40 | 2 |
| 400 | 20 | 0 |

$610 - 386 = \underline{\hspace{2cm}}$

Subtracting with decomposing in the 10's

$$517 - 209 = \underline{\hspace{2cm}}$$

| | | |
|-----|----|----|
| 500 | 10 | 17 |
| 200 | 0 | 9 |
| 300 | 0 | 8 |

$\underline{\hspace{2cm}} = 378 - 179$

Subtracting with decomposing in the 100's

$$604 - 523 = \underline{\hspace{2cm}}$$

| | | |
|----------------|-----|---|
| 500 | 100 | 4 |
| 600 | 20 | 3 |
| 500 | 80 | 1 |

$400 - 153 = \underline{\hspace{2cm}}$

Subtraction with decomposing in the 10's and 100's

$$900 - 789 = \underline{\hspace{2cm}}$$

| | | |
|----------------|----------------|----|
| 800 | 90 | 10 |
| 900 | 100 | 9 |
| 700 | 80 | 9 |
| 100 | 10 | 1 |

$\underline{\hspace{2cm}} = 732 - 485$