# Order of Operations

To evaluate expressions involving more than one operation, mathematicians have agreed on a set of rules called the **Order of operations.**


**P: Parenthesis**
**E: Exponents**
**M: Multiplication**
**D: Division**
**A: Addition**
**S: Subtraction**

## Order of Operations

1. Evaluate expressions inside grouping symbols.
2. Evaluate powers.
3. Multiply and divide from left to right.
4. Add and subtract from left to right.

**Example 1: Evaluate the expression**

$$50 \bullet 2000 + 7 \bullet 64{,}100 + 6 \bullet 106{,}700 + 198{,}900$$

$50 \bullet 2000 + 7 \bullet 64{,}100 + 6 \bullet 106{,}700 + 198{,}900$
$= 100{,}000 + 448{,}700 + 640{,}200 + 198{,}900$ Multiply.
$= 1{,}387{,}800$ Add.

Parentheses ( ), brackets [ ], and fraction bars are common grouping symbols. Grouping symbols indicate operations that should be performed first.

For example, compare the expressions $3 \bullet 2 + 5$ and $3(2 + 5)$.
To evaluate $3 \bullet 2 + 5$, you multiply first, then add. To evaluate $3(2 + 5)$, you add first, then multiply.