# Order of Operations

**PEMDAS**

(Please Excuse My Dear Aunt Sally)

- **P**lease → Parentheses
- **E**xcuse → Exponents
- **M**y → Multiplication
- **D**ear → Division

**Multiplication and division are done in the order they appear, from left to right. This is because they have the same importance.**

- **A**unt Addition
- **S**ally Subtraction

**Similarly, addition and subtraction are done in the order they appear, from left to right. This is because they have the same importance.**

1. **Simplify any expression in Parentheses (or brackets).** $6^2+(18-3)\div 5$

$$(2)-5\ 6^2+15\div 5\ (2)-5 \qquad \frac{6^2+(18-3)\div 5}{2\cdot 7-9\div 3+2} \rightarrow \frac{6^2+15\div 5\ (2)-5}{2\cdot 7-9\div 3+2}$$

2. **Simplify expressions with Exponents.**

$$\frac{6^2+15\div 5\ (2)-5}{2\cdot 7-9\div 3+2} \rightarrow \frac{36+15\div 5\ (2)-5}{2\cdot 7-9\div 3+2}$$

3. **Carry out Multiplication or Division *from left to right*.** $36+20 \div 5$

$(2)-5\ 36+4\ (2)-5\ 36+8-5$

$2 \cdot 7-9 \div 3+2 \rightarrow 14-9 \div 3+2 \rightarrow 14-3+2$

4. **Simplify Addition or Subtraction *from left to right.***

$36+8-5\ 44-5\ 39 \rightarrow 14-3+2 \rightarrow 11+2 \rightarrow 13$

5. **Simplify fractions as needed.** $\rightarrow \frac{39}{13}=3$ **THE END!** ☺