Order of Operations
PEMDAS

P – Do what's inside the parentheses first
E – then do exponents and monsters
M and D – multiply and/or divide from LEFT TO RIGHT doing what comes first
A and S – add and/or subtract from LEFT TO RIGHT doing what comes first

Reminders:
- How to multiply signed numbers:
    - Same signs result in a positive answer. $(+)(+) = +$ $(-)(-) = +$
    - Different signs result in a negative answer $(+)(-) = -$ $(-)(+) = -$
- Parentheses go away when you multiply.
- Ask yourself whom the exponent belongs to. It only belongs to what it is right next to. If it is next to a parenthesis, everything inside belongs to the exponent. If it is just next to a number, the exponent ONLY belongs to the number.
- Add in missing 1's. You need to put 1's in front of any parentheses that don't already have a number in front. The only exception is if there is a division sign in front of the parenthesis; then no missing one is needed.

Practice Order of Operations Problems:
- $-3^2 - 18 \div 9(-2-2) - \sqrt[3]{64} - 8^0$
- $\sqrt[3]{216} - (-2-1)^2 - 12 \div 4(-1-2) - (-3-5)^0$
- $-(-2-2)^2 - \sqrt[3]{27} - 9 \div 3(-1-2) - 3^2$
- $-3 - 2\left[-1 - 3(-1-1) - 7^0\right] - 3^2 - 10 \div 5(-1-1)$

Multiplication and Division Word Problems

Practice Word Problems:
- Ed buys a car for $8,000. He makes 36 payments of $219. What is his payoff amount?
- Michelle can make 20 cookies in an hour. How many cookies can she make in 8 hours?