

**Simplifying Expressions****Order of Operations**

1. Parenthesis – and Grouping Symbols
2. Exponents
3. Multiplication and Division from left to right
4. Addition and Subtraction from left to right

**Combining Like - Terms**

1. Find terms with the same base and the exact same exponent(s)
2. Add the coefficients (the numbers in front of the variables)
3. Rewrite the base and exponent(s)

**Simplify an Expression**

1.  $5x - \frac{2}{3}(6x + 9) - 11$

$$5x - \frac{2}{3}(6x) - \frac{2}{3}(9) - 11$$

$$5x - 4x - 6 - 11$$

$$x - 17$$

2.  $12 - \frac{1}{4}(8x + 52) + 25x$

$$12 - \frac{1}{4}(8x) - \frac{1}{4}(52) + 25x$$

$$12 - 2x - 13 + 25x$$

$$23x - 1$$

3.  $13 - \frac{5}{2}(4x - 18) + 27x$

$$13 - \frac{5}{2}(4x) - \frac{5}{2}(-18) + 27x$$

$$13 - 10x + 45 + 27x$$

$$17x + 58$$