Algebra 1
West Aurora School District
State Goal 6 – Number Sense

STATE GOAL 6 – Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, ratios, and proportions.

Concepts: **Need to <u>Know</u> About Number Sense**

- Equivalent Number Forms
- Order of Operations
- Number Sentences/Word Problems
    - Rational Numbers
        - Single and Multi-Step
        - Ratios and Proportions
- Percents

Skills: **Be Able to <u>Do</u>**

- **Represent** (Equivalent Number Forms)
- **Apply** (Knowledge and Rules of Order of Operation)
- **Set-up** (Single and Multi-Step Problems Involving Ratios, Proportions, Percents, etc with Rational Numbers)
- **Evaluate** (Single and Multi-Step Problems Involving Ratios, Proportions, Percents, etc with Rational Numbers)
- **Solve** (Single and Multi-Step Problems Involving Ratios, Proportions, Percents, etc with Rational Numbers)

Topics or Contexts: Equivalent number forms include the following: fraction/decimal/percent, radical/rational exponents, exponential, absolute value, scientific notation.

Problems involving ratios and proportions may include the following: quantity comparisons, rate of change, unit rate.

Percent problems would be dealing with: sales tax, tips, interest, discount, markup, quantity comparisons, commission, compound interest.

All problems need to include students judging reasonableness of solutions.

Various lessons in textbooks

Problem solving activities involving real-life situations (Problems of the Week).

ACT/WorkKeys Worksheets – Learn-a-Test – Coach Software