

**Prealgebra ~ Lesson 7**

Work the following examples as you listen to the recorded lecture.

**Exponents**

$$2^3$$

Write the following using exponential notation:

Example 1:

$$5 \cdot 5 \cdot 5 \cdot 5$$

Example 2:

$$6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$$

Example 3:

$$4 \cdot 4 \cdot 3 \cdot 3 \cdot 3$$

Example 4:

$$7 \cdot 4 \cdot 4 \cdot 4$$

Evaluate the following:

Example 5:  $6^2$

Example 6:  $3^5$

Example 7:  $8^1$

Example 8:  $1^{95}$

**Order of Operations**

Mathematical operations must be completed in the correct order by operation. The rules are simple and easy to remember – just follow the signs in the house, working from top to bottom and left to right:

1. **P**arentheses - Roof
2. **E**xponents - Attic
3. **M**ultiplication and **D**ivision – 2<sup>nd</sup> Floor
4. **A**ddition and **S**ubtraction – 1<sup>st</sup> Floor

Each floor of the house must be cleared before you can go down to the next level.  
**Work top to bottom, left to right...  
 just like reading a book!**