

Chapter 2 sec 5  
Order of operations

Check page 148 in the book for the guidelines

- 1) Grouping symbols
- 2) Exponents
- 3) Multiplication, division from left to right
- 4) Addition, subtraction from left to right.

Example 1: page 148

simplify: a)  $(-3)^2$     b)  $-3^2$

Example 2: page 149

Simplify:  $-2 - 3(5 - 7)$

Example 3:

simplify:  $-2(2-4)^2 - 3(3-5)^3$

Example 4

Simplify:  $-24 \div 8(-3)$

Example 6: page 150

Simplify:  $\frac{-5-5(2-4)^3}{-22-3(-5)}$

Absolute value

Number between two bars:  $|5|$  read, "the absolute value of 5"

Absolute value indicates a distance from zero to the number, so  $|5| = 5$

The absolute value is another grouping symbol similar to the fraction bar.

What is the difference between  $-(-3)$  and  $-|3|$ ?

Example 8: Page 151

Simplify:  $-3 - 2|5 - 7|$