9.30.2011 Multiplying and Dividing Integers

Do Now:

1. $3(8 - 2) + 12$
   $3(6) + 12$
   $18 + 12 = $ 30
2. $\frac{17-12}{5} + (4 - 2)$
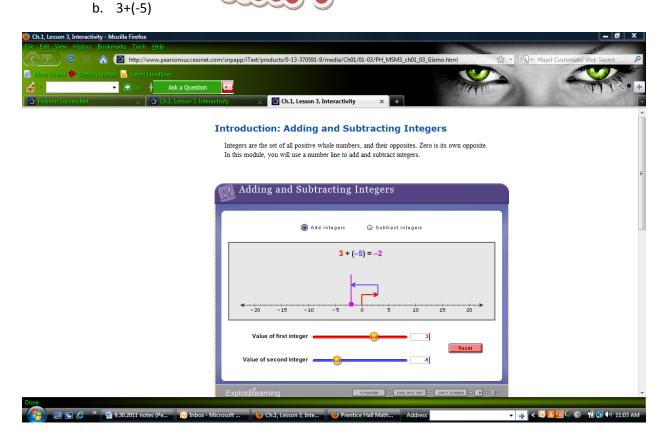 $\frac{5}{5} + (2)$
   $1 + 2 = $ 3
3. $14 + (-11) = $ 3
4. $9 - (-8) = $ 17
5. Draw a visual solution to the following two problems.
   a. -6-(-1)   removing 1 negative leaves 5 negatives
   b. 3+(-5)

Inverse Operations Definition: Inverse operations undo each other. Multiplication and division are inverse operations. Addition and subtraction are also inverse operations.

Ex. Since 6÷3 = 2, we know that 2·3 = 6

Rules for Multiplying and Dividing Integers

- Multiplication and division are performed as always with following rules for sign
  - (negative)(negative)=(positive)   (negative)÷(negative)=(positive)
  - (positive)(positive)=(positive)   (positive)÷(positive)=(positive)
  - (negative)(positive)=(negative)   (negative)÷(positive)=(negative)
  - (positive)(negative)=(negative)   (positive)÷(negative)=(negative)