Foundations for College Algebra
9:00am MTWF
University of North Georgia
Fall 2015
Quiz #2

Name: *Key*   Date: *August 28, 2015*

1.   a.) State the *Commutative and Associative Tools*, Algebraically, b.) state each tool's **Key** idea, and c.) give an example of each tool.

Commutative: $a + b = b + a$

$a \cdot b = b \cdot a$

Key — Order changes, but result is the same.

e.g. $7 + 5 = 5 + 7 = 12$

Associative: $a + (b + c) = (a + b) + c$

$a(b \cdot c) = (a \cdot b)c$

Key — Association changes, order does not; result the same.

$3 + (5 + 2) = 3 + 5 + 2$
$3 + 7 = 8 + 2$
$10 \quad = 10$

2.   If the result of addition is zero, then what tool was used?

Additive Inverse

$a + (-a) = 0$

3.   Let's assume the following example is the "right-side" form of the *Distributive Tool,* use the tool to write the "left-side" form: $15t + 10$.

$5(3t + 2) = 5 \cdot 3t + 5 \cdot 2$

$= 15t + 10$