Adding, Multiplying, and Squaring Base Numbers **Name**_____

$n + n = ?$ **$n \cdot n = ?$** **$n^2 = ?$**

Make a prediction about which two expressions in a row will have the same value and what that value will be. Then, perform the operations to check your prediction and complete the last column.

A	B	C	List the expressions that are Equivalent and write their value
$4 + 4$	$4 \cdot 4$	4^2	
$2 \cdot 10$	$10 + 10$	10^2	
$16 + 16$	16^2	$2 \cdot 16$	
20^2	20×20	$20 + 20$	
8×8	$8 + 8$	8^2	
$12(12)$	$2 \cdot 12$	12^2	
$2(9)$	9^2	$9 + 9$	
$15 + 15$	$15(15)$	15^2	
$30 \cdot 30$	30^2	$30 + 30$	
25^2	2×25	$25 + 25$	

Circle the expression(s) with the greatest value in each problem below.

1. $2 \cdot 19$ $19 + 19$ 19^2

2. $7 + 7$ 7^2 $7 \cdot 7$

3. $5 + 5$ $5 \cdot 5$ 5^2

4. $2 + 2$ $2 \cdot 2$ 2^2

5. How was problem # 4 different than all the other problems on this page? Why is that?

6. True or False: n^2 will always be greater than $n + n$? Explain your answer on the back of this page.