Name: Date:

Logarithms

Directions: Please fill in the missing values on the talbe below using your calculator. Round to the fourth decimal place.

n	1	2	3	4	5	6	7	8	9
log(n)	0		0.4771					0.9031	
n	10	20	30	40	50	60	70	80	90
log(n)	1	1.3010				1.7782			
		-		_	-			-	
n	100	200	300	400	500	600	700	800	900
$\log(n)$	2				2.6990				2.9542

1. What patterns do you notice going across each row?

2. What about the patterns produced going down a column?

3. How do the numbers in the table above relate to the second set of rulers from in class?

Directions: Use your rulers to answer the following prompts.

$$log(2) + log(3) =$$

 $log(5) + log(8) =$
 $log(8) + log(10) =$

1. What do you notice about these values? What would be a logarithm property describing this relationship?

log(10) - log(5) =log(200) - log(10) =log(90) - log(3) =

2. What do you notice about these values? What would be a logarithm property describing this relationship?