2.9 Logarithmic Expressions

AP Precalculus

Name:

CA #2

Directions: Rewrite the following logarithms as exponents.

1)
$$log_{27} \frac{1}{9} = -\frac{2}{3}$$

 $2) \log 10,000 = 4$

Directions: Rewrite the following exponents as logarithms.

$$3) 49^{\frac{1}{2}} = 7$$

4) $2^{-3} = \frac{1}{8}$

Directions: WITHOUT using a CALCULATOR, find the value of logarithm.

6) log 100

Directions: Use a CALCULATOR to find the value of logarithm. Round to three decimal places.

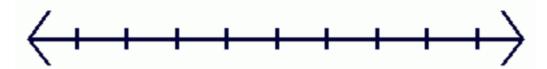
8) log 9843

Directions: For the given data construct a plot using a LOGARITHMIC scale using the given bases. Be sure to label your axis and show your math.

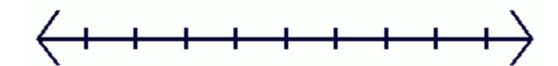
9)

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Super Hero	Bee Population at their home
Iron Man	18
Scarlett Witch	3
Black Panther	7
Dr. Strange	38
Ant-Man	265

Base 2



Base 3



Answers	to	1 1	$C\Lambda$	#2
Answers	LO	1.1	LLA	# /.

1. $27^{-\frac{2}{3}} = \frac{1}{9}$	$2. \ 10^4 = 10,000$	$3. \log_{49} 7 = \frac{1}{2}$	4. $log_2 \frac{1}{8} = -3$	5. 3
6. 2	7. 2.558	8. 3.993	9. SEE BELOW	

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Dr. Strang	e		38		h6 1.	38 =	6.24	9		38	=	3,311			
Ant-Man			265		وكا	165	= 8.0	15	04	າ ພ	5	5.0	79		
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