

NAME: _____ Score _____/10

Please **print** your name**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION**

1. Write the rule for the exp function.

$$\exp(x) = e^x$$

2. Evaluate $\exp_6(3)$.

$$\exp_6(3) = 6^3 = 216$$

3. Write the name of the inverse of \exp_7 ?

The name is \log_7

4. Write the name and the rule for the inverse of \log_9 .

The name is \exp_9

The rule is $\exp_9(x) = 9^x$

5. Solve the equation $\log(3x - 17) = 2$. SHOW your work. NO decimal approximations.

$$\log(3x - 17) = 2$$

$$\exp_{10}(\log(3x - 17)) = \exp_{10}(2)$$

$$3x - 17 = 10^2 = 100$$

$$3x = 117$$

$$X = 39$$