Name_____

PTest Logarithms Date_____

1. ***Define “logarithm”:

2. ***Write $a = b^n$ as a logarithms

3. ***Write the product rule for logarithms

4. ***Write the quotient rule for logarithms

5. ***Write the Strategy for Solving Logarithmic Equations (2 cases)

6. **Convert $10^2 = 100$ as a logarithm

7. **Convert $5^3 = 125$ as a logarithm

8. **Convert $\log_3 81 = 4$ to an exponential

9. **Convert $\log_2 32 = 5$ to an exponential

Solve the following

10. ** $\log 1000 = x$

11.** $\log_4 (x^2 - 9) = 2$

12.** $\log x + \log 5 = 1$

13.** $\log_3 x - \log_3 4 = 2$

14. *ACT $\log_6 x - \log_6(x-1) = \log_6 3$

15. *ACT *Caution, when base is not written!* $\log(x-1) + \log(x+2) = \log_6 6$

16. ** SAT3 $\log_5 x - \log_5 x = 2$

17. ****Parental contact information: Provide phone number, home address, email or text. (CHP)