2.13A Exponential and Logarithmic Equations and Inequalities

AP Precalculus Name: _____ **CA #2**

CALCULATOR ACTIVE: Instructions: Solve each equation. Have exact answer and answer rounded to nearest thousandth.

1) $log_7(2x-5)=2$

2) $5(2^{3x})-4=46$

3) $\log(x-3)-\log(x-4)=\log(5)$

4) $\frac{1}{2}e^{x-4}=14$

5) $log_6(5)+log_6(2x-4)=log_6(5x+15)$

6) $12-log_2(x+9)=14$

CALCULATOR ACTIVE: Instructions: Solve each equation with a graphing calculator. Round to nearest thousandth.

7) $\frac{4}{5}(4^{2x-5})-4=20$

ANSWERS

1) 27
2) $\frac{log_2 10}{3} \approx 1.107$
3) $\frac{17}{4}$
4) $\ln 28 + 4 \approx 0.7332$
5) 7
6) -8.75
7) 3.727