2.13A Exponential and Logarithmic Equations and Inequalities

AP Precalculus Name: _____ **CA #1**

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

1) $log_2(x-3)=5$

2) $2(3^{4x})=40$

3) $\log(x-3)+\log(x-4)=\log(7-x)$

4) $8e^{10x}=640$

5) $log_6(3)+log_6(x-8)=log_6(4x-26)$

6) $15+log_2(2x)=20$

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

7) $\frac{4}{5}log_2\left(2x+\frac{15}{2}\right)+14=17$

ANSWERS

1) 35
2) $\frac{log_3 20}{4} \approx 0.682$
3) 5
4) $\frac{\ln 80}{10} \approx 0.438$
5) No Solution
6) 16
7) 2.977