Alg 2 Hwk #10 Spring 2020 Name

Solving exponential and logarithmic equations

Solve each to the nearest hundredth. Show your work.

1. $15^x = 5000$

2. $\log_3(x+9) - 5 = 2$

3. $62 - 2e^{10x} = 44$

4. $5 \cdot 2^{4x-3} + 4 = 102$

5. $2\ln(5x-8) + 13 = 20$

6. The population of a city in decreasing 2.4% each year. The population in 2005 was 125,000. In how many years since 2005 will the population reach 80,000? Round to the nearest hundredth.