Name: —————————————————————   Date: ———————————

Instructions: Please complete the following problems.

Problem 1. Solve: $3^{2x+1} = 27$

Problem 2. Solve: $5^{2-x} = 3^x$

Problem 3. Solve: $\frac{1}{3}\log_3(2x - 1) + \frac{2}{3} = 1$

Problem 4. Solve: $5^{2x} - 4 \cdot 5^x = 21$

Problem 5. Solve: $e^{2x} - 5e^x + 4 = 0$

Problem 6. Solve: $\log(x + 8) + \log(x - 1) = 1$

Problem 7. Solve: $\log_2(x + 10) - \log_2(x - 5) = 4$

Problem 8. Solve: $2^{3x+5} = 7^{x-4}$

Problem 9. Solve: $\log(x) + \log(x - 99) = 2$