Review on sections 8-5 and 8-6

1. Solve $5^{8x} = 49$.

2. Use the Change of Base Formula to evaluate $\log_4 30$.

3. ~~Use the Change of Base Formula to~~ solve $2^{7x} = 77$.

4. Solve $125^{9x-2} = 150$.

5. Solve $\log(3x + 5) = 1$.

6. Solve $3 \log 2x = 4$.

7. Solve $\log 3x + \log 10 = 0$.

8. Solve $\log(x + 9) - \log x = 3$.

9. Solve $2 \log 4 - \log 3 + 2 \log x - 4 = 0$.

Write the expression as a single natural logarithm.

10. $3 \ln 4 + 6 \ln b$