

Solve the following equations.

1. $-2 \log_4 x = \log_4 9$

2. $\log x + \log (x + 15) = 2$

3. $\ln x + \ln (x + 2) = 4$

4. $2^{x+1} = 5^{1-2x}$

5. $2^{2x} + 2^{x+2} - 12 = 0$

6. $1.2^x = (0.5)^{-x}$