

College Algebra Worksheet (5)

Solve Logarithmic Equations

Solve the logarithmic equations

$$1. \ 2 \log_4(x) + 3 = 0$$

$$2. \ \log_4 x + \log_4(2x + 1) = 0$$

$$3. \ \log x - \log(x^2 - 1) = -2\log(x - 1)$$

$$4. \ 2\ln(x + 3) - \ln(x + 1) = 3\ln 2$$

$$5. \log_2(2x - 9) = 2 - \log_2(x - 1)$$

$$6. \log(x - 2)(2x - 3) = \log x^2$$

$$7. \log_x\left(\frac{1}{9}\right) = 2$$