

Exponential and Logarithmic Equations

(covers Sullivan 5.6)

Exponential Equations

Ex 1.

Solve.

$$2e^{12x} + 1 = 18$$

$$2^x = 3^{x+1}$$

$$3xe^x + x^2e^x = 0$$

$$e^{2x} - e^x - 6 = 0$$

Logarithmic Equations

Ex 2.

Solve.

$$4 + 3 \log_4(2x) = 16$$

$$\log(x + 2) + \log(x - 1) = 1$$