



5.6: Solving Exponential and Logarithmic Equations

Example 1)

$$7^{2x} = 7^{48}$$

Example 2)

$$\log_2(x + 6) = \log_2(10x)$$

Example 3)

$$2\log(x) - \log(3) = 2$$

Example 4)

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



Example 5)

$$8^x = 44$$

Example 6)

$$2 - 6^x = -9$$

Example 7)

$$\log_3(7x + 1) - \log_3(x - 2) = 2$$



Example 8)

$$4^x = (1/2)^{x-3}$$

Example 9)

$$\log(2x) = 2 - \log(x - 5)$$



Example 10)

$$e^{x+7} = 10$$

Example 11)

$$2\ln(x + 6) = -18$$



Classwork/Homework Assignment

Problem Set 5.6