Cvičení 4:

Uveďte podmínky a řešte rovnice:

1.
$$log_2(x+1) = 3$$

2.
$$4log_3(2x-1) = 12$$

3.
$$log_{\frac{1}{2}}(2-x) = -2$$

4.
$$log_4(5x-4) = 2$$

5.
$$log x = 2log 5 + log 4$$

6.
$$\frac{\log_3 x}{1 + \log_3 2} = 2$$

7.
$$log_6(x+1) + log_6x = 1$$

8.
$$\log(x+3) = \log x + \log 3$$

9.
$$log_4(3x + 2) - 2log_4x = 2 - log_48$$

10.
$$1 + log_3(5 - x) - log_3(2x - 1) = log_3(2x - 1)$$

11.
$$log_3 \frac{6x-2}{x-3} = 2$$

$$12. \frac{\log_3(6x-2)}{\log_3(x-3)} = 2$$

13.
$$log 3 - log(x + 1) + log x = log(x - 1) + log 2$$

14.
$$2 \log(x - 1) + \log 2 = 2 \log(2x - 1) - \log 2$$

15.
$$log_2(x+2) + log_2x + 2 = 2log_2(2x-1)$$