

Cvičení 4:

Uveďte podmínky a řešte rovnice:

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

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

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

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

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

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

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

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

9. $\log_4(3x + 2) - 2\log_4 x = 2 - \log_4 8$

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. $\log_2(x + 2) + \log_2 x + 2 = 2\log_2(2x - 1)$