

1  $\frac{\log_2(3x+2)}{\log_3(2x+3)} \leq 0$

2  $\frac{\log_2(2x^2-13x+20)-1}{\log_3(x+7)} \leq 0$

3  $\log_{0,1}(x^2+x-2) > \log_{0,1}(x+3)$

4  $\left(\frac{1}{2}\right)^{\log_2(x^2-1)} > 1$

5  $\frac{x^2-4}{\log_{\frac{1}{2}}(x^2-1)} < 0$

6  $\log_3((x+2)(x+4)) + \log_{\frac{1}{3}}(x+2) < \frac{1}{2} \log_{\sqrt{3}} 7$

7  $\log_2 \frac{3x-2}{x-1} + 3 \log_8 \frac{(x-1)^3}{3x-2} < 1$

8  $\log_{2-x}(x+2) \cdot \log_{x+3}(3-x) \leq 0$

9  $\frac{\log_3 x}{\log_3(3x+2)} < 1$

10  $\frac{\log_3(10x+3) \cdot \log_3(3x+10)}{\log_3(10x) \cdot \log_3 x} \geq 0$

11  $\log_{x+2}^2(x-18)^2 + 32 \leq 16 \log_{x+2}(36+16x-x^2)$

12  $\log_{\frac{3x-1}{x+2}}(2x^2+x-1) > \log_{\frac{3x-1}{x+2}}(11x-6-3x^2)$

13  $\log_{x+1}(19+18x-x^2) - \frac{1}{16} \log_{x+1}^2(x-19)^2 \geq 2$

14  $\frac{4^{x^2+3x-2} - 0,5^{2x^2+2x-1}}{5^x - 1} \leq 0$

**15**

$$\frac{\log_{0,2} \frac{1}{2x-1} + \log_5(2-x)}{\log_5(2x-1) + \log_{0,2} \frac{1}{3-2x}} \geq 0$$

**16**

$$\log_{2x+3} x^2 < 1$$

**17**

$$\log_x(\log_9(3^x - 9)) < 1$$

**18**

$$\frac{\log_2(3 \cdot 2^{x-1} - 1)}{x} \geq 1$$

**19**

$$\log_5(x+2) + \log_5(1-x) \leq \log_5((1-x)(x^2 - 8x - 8))$$

**20**

$$\log_{\frac{x}{3}}(\log_x \sqrt{3-x}) \geq 0$$