

023: $x+1 > 0 \quad x > -1$ 1979948

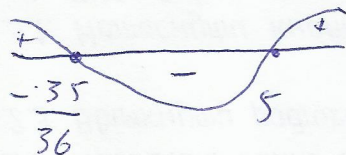
$$\log_6(x+1) - 2 \frac{1}{\log_6(x+1)} < -1$$

$$\log_6^2(x+1) + \log_6(x+1) - 2 < 0$$

$$(\log_6(x+1) + 2)(\log_6(x+1) - 1) < 0$$

$$\begin{cases} \log_6(x+1) < -2 \\ \log_6(x+1) > 1 \end{cases} \Rightarrow \begin{cases} x+1 < \frac{1}{36} \\ x+1 > 6 \end{cases} \Rightarrow \begin{cases} x < -\frac{35}{36} \\ x > 5 \end{cases}$$

$$\begin{cases} \log_6(x+1) > -2 \\ \log_6(x+1) < 1 \end{cases} \Rightarrow \begin{cases} x+1 > \frac{1}{36} \\ x+1 < 6 \end{cases} \Rightarrow \begin{cases} x > -\frac{35}{36} \\ x < 5 \end{cases}$$



$$-\frac{35}{36} < x < 5$$