

-2

$$\left(\frac{1}{9}\right)^{\frac{1}{2}} \log_{\frac{1}{9}} \sqrt{x+3} = -2x - \frac{3}{2}$$

$$\left(\frac{1}{9}\right)^{\frac{1}{2}} \log_{3^{-1}} \sqrt{x+3} = -2x - \frac{3}{2}$$

$$\left(\frac{1}{9}\right)^{\frac{1}{2}} \cdot \left(-\frac{2}{3}\right) \log_3 (x+3)^{0.5} = -2x - \frac{3}{2}$$

$$(3^{-2}) \cdot 0.5 \log_3 (x+3) = -2x - \frac{3}{2}$$

$$\begin{array}{l} \frac{x+3 > 1}{x > -2} \\ \frac{0 < x+3 < 1}{-3 < x < -2} \end{array}$$

$$(3^{-2}) \cdot 0.5 \log_3 (x+3)$$

$$3 \log_3 (x+3)^{-1} = -2x - \frac{3}{2}$$

$$\frac{1}{x+3} = -2x - \frac{3}{2} \quad | \cdot 2(x+3) \rightarrow 2 = -4x^2 - 12x - 3x - 9 \rightarrow 4x^2 + 15x + 11 = 0$$

$$(3^{-2}) \cdot 0.5 \log_3 (x+3) = -2x - \frac{3}{2}$$

$$3 \log_3 (x+3) = -2x - \frac{3}{2}$$

$$x+3 = -2x - \frac{3}{2}$$

$$3x = -4\frac{1}{2} \rightarrow x = -1\frac{1}{2}$$

תוצאות
 $x+3 > 0$
 $x > -3$

$$x = -1 \quad | \text{pl } 106 \quad \frac{x = -11}{8, 1} \quad | x = -1$$