

1.66  
1

$$\log x \frac{1-x^2}{x-2} > 0$$

$$\frac{1-x^2}{x-2} > x^0 = 1 \quad \sqrt{x^2} \quad x > 1 \quad \therefore \log x > 0$$

$$0 < \frac{1-x^2-x+2}{x-2} = \frac{-x^2-x+3}{x-2}$$

$$\begin{array}{cccc} + & - & + & - \\ \frac{1-\sqrt{13}}{-2} & \frac{1-\sqrt{13}}{-2} & 2 & - \end{array}$$

$$x < \frac{1+\sqrt{13}}{2} \quad \vee \quad \frac{1-\sqrt{13}}{-2} < x < 2$$

~~תחום ההגדרה~~ תחום ההגדרה נותן

$$\boxed{\frac{1-\sqrt{13}}{-2} < x < 2}$$

$$\begin{array}{l} \text{תחום ההגדרה} \\ \frac{1-x^2}{x-2} > 0 \quad x \neq 2 \\ 1 \neq x > 0 \\ + \quad + \quad + \\ - \quad - \quad - \end{array}$$

$$x < -1 \quad \vee \quad 1 < x < 2$$

$$\boxed{1 < x < 2} \quad \text{תחום ההגדרה}$$