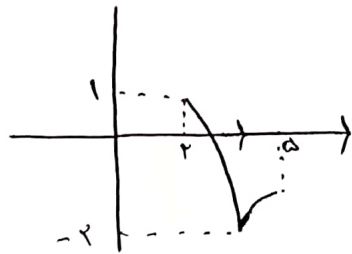


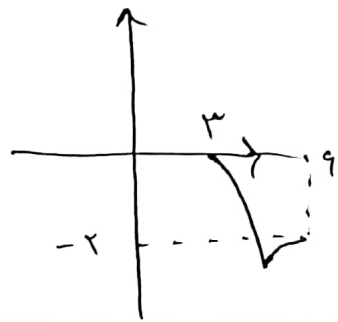
$$g(x) = -\frac{1}{2}(-x+1) - 3$$

$$g(-15) + g(-42) = -14 + (-9) = -23$$

g f(x)



$$g_x = f(x-1) - 1$$



	۱
$\begin{aligned} \alpha, \beta = x=1, y=2 \\ y^{x-2} - 1 \xrightarrow{+1} -V \\ 2x+2=1 \Rightarrow x=-1/2 \end{aligned} \} \rightarrow \alpha\beta = \frac{V}{2}$	۲
$\begin{aligned} x - \sqrt{x(x+1)} &\longrightarrow \sqrt{2x+2} - 3 + 5 = \sqrt{2x+2} + 2 \\ \sqrt{2x+2} + 2 = \frac{V}{2} &\Rightarrow \sqrt{2x+2} = \frac{V}{2} - 2 \Rightarrow 2x+2 = \frac{9}{4} \\ x &= \frac{1}{4} \end{aligned}$	۳
$\begin{aligned} Df(x-1) &= (a+1, 5] \\ Dg(x+1) &= [2, b-1) \\ a+1 < b-1 &\rightarrow a-b < -2 \end{aligned}$	۴
$\begin{aligned} Df\left(\frac{x}{2}+1\right) &= [-2, 5] \Rightarrow Df = \left[-\frac{1}{2}, \frac{V}{2}\right] \\ Dg_2 &= Df = \left[-\frac{1}{2}, \frac{V}{2}\right] \end{aligned}$	۵