

دوازدهم سپهر A

اصول قضی ۱۱

تالیف کتاب

۲۰

(۱)

$$f\left(\frac{3u+2}{5}\right)$$

$$-2 \leq \frac{3u+2}{5} \leq 2$$

$$-10 \leq 3u+2 \leq 10$$

$$-12 \leq 3u \leq 8$$

$$-4 \leq u \leq \frac{8}{3}$$

$$f\left(\frac{t}{5}\right)$$

$$D_f = [-2, 2]$$

$$-2 \leq \frac{t}{5} \leq 2$$

$$-10 \leq t \leq 10$$

$$f\left(\frac{t}{5}\right)$$

$$-1 \leq t \leq 5$$

$$-1 \leq u \leq 5$$

$$f\left(\frac{t}{3}\right)$$

$$D = [-2, 3]$$

$$-2 \leq \frac{t}{3} \leq 3$$

$$-6 \leq t \leq 9$$

$$-1 \leq \frac{t}{3} - 2 \leq 5$$

$$f\left(\frac{t}{3}\right)$$

$$D = [-1, 3]$$

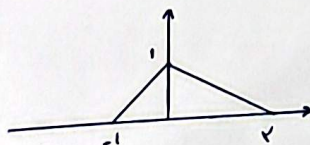
$$-1 \leq \frac{t}{3} \leq 3$$

$$-3 \leq t \leq 9$$

$$-2 \leq \frac{t}{3} + 1 \leq 6$$

$$-1 \leq \frac{t}{3} \leq 5$$

$f(u)$

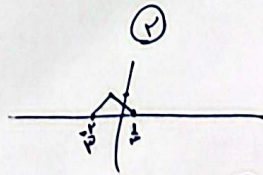
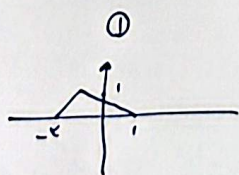


$$f\left(\frac{t}{5}\right)$$

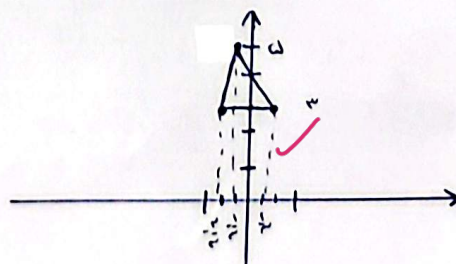
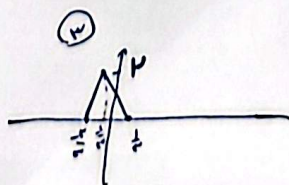
$$-1 \leq \frac{t}{5} \leq 5$$

$$-5 \leq t \leq 25$$

$$\frac{5}{3} \geq u \geq \frac{5}{5}$$



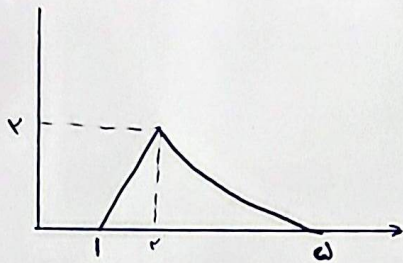
$$g = \frac{1}{5} f\left(\frac{t}{5}\right) + 2$$



(۲)

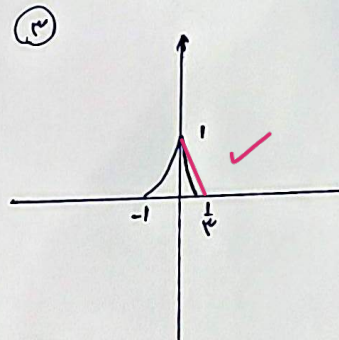
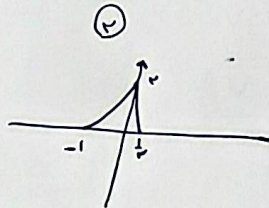
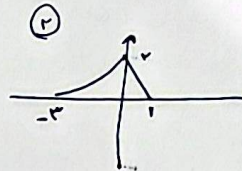
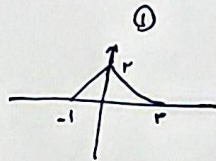
معین نوری

$f(u)$



(2) (5)

(2) $\frac{1}{r} f(r - ru)$



$J = -\frac{1}{r}u^2 + \frac{r}{0}u + 1 \xrightarrow{\text{مساوی}} S(r, v)$

$S_{ru} = \left(\frac{r}{0}, \frac{v}{10}\right)$

(2) (6)

پ: ریشه های تابع جبره:

$\frac{-b}{2a} = \frac{\frac{0}{r}}{\frac{1}{r}} = \frac{0}{1} = 0$

$-\frac{1}{r}\left(\frac{r}{10}\right) + \frac{r}{0}\left(\frac{r}{0}\right) + 1$

$-\frac{r}{10} + \frac{r}{0} + 1 = \frac{r}{10}$

$\frac{r}{0} \xrightarrow{\text{مساوی}} 0$

$\frac{r}{10} \xrightarrow{\text{مساوی}} 0$

$f\left(u - \frac{1}{0}\right) + \frac{rv}{10}$

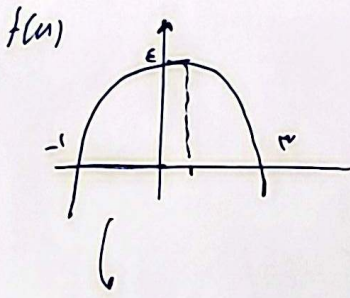
$\Rightarrow -\frac{1}{r}u^2 + \frac{rv}{10}u + \frac{rv}{10} + \frac{r}{0}u - \frac{rv}{10} + \frac{rv}{10} = -\frac{u^2}{r} + \frac{rv}{10}u - v$

$\Rightarrow -\frac{1}{r}(u^2 - 11u + v) = 0 \Rightarrow -\frac{1}{r}(u-1)(u-v) = 0$

~~$\frac{1}{r}(u-1)(u-v) = 0$~~

$u_1 = 1$
 $u_2 = v$

١١ من نصي



$$A(\alpha, \beta) \rightarrow \gamma = 1 - r f(r + r)$$

$$\alpha \beta = \beta$$

$$\alpha(1-r)(1+1) \rightarrow \alpha(u^2 - ru - r) \rightarrow \alpha(-\epsilon) \neq$$

$$\boxed{\alpha = -1}$$

$$\gamma = -u^2 + ru + r \rightarrow \frac{-b}{2a} = 1 \Rightarrow ru + r = 1$$

$$-(1+r+r) = 1$$

$$ru = -1 \rightarrow \boxed{a = -\frac{1}{r}}$$

$$-\frac{1}{r} = \alpha$$

$$-r = \beta$$

$$\Rightarrow \alpha \beta = \boxed{\frac{1}{r}}$$

$$1 + r f(\epsilon) = \boxed{-\gamma}$$

$$f(0)$$

$$D_f = (a, \epsilon]$$

$$D_g = [-1, b)$$

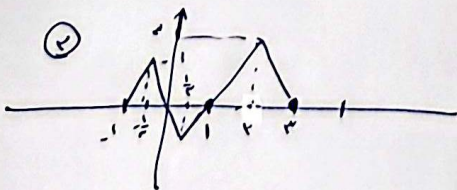
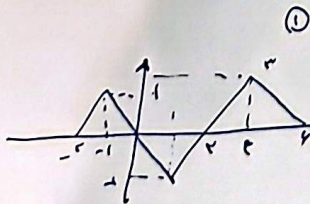
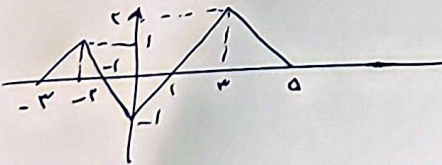
$$\gamma = f(u-1) + g(u+1) \rightarrow D = (-r, d)$$

$$D = (a-1, d) \wedge D = [-r, b-1) \rightarrow b-1 = d \rightarrow \boxed{b = \epsilon}$$

$$a-1 = -r \rightarrow \boxed{a = -r}$$

$$a-b = -r - \epsilon = \boxed{-\gamma}$$

$$\gamma_i = f\left(\frac{u}{r} + 1\right)$$



$$\gamma_r = \sqrt{|r f(u) - r|}$$

$$f\left(\frac{u}{r} + 1\right)$$

$$-r < u < d$$

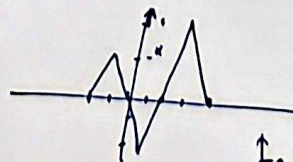
$$\frac{-r}{r} < \frac{u}{r} < \frac{d}{r}$$

$$\frac{-1}{r} < \frac{u}{r} + 1 < \frac{d}{r}$$

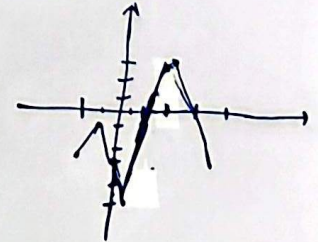
$$\Rightarrow D = \left[-\frac{1}{r}, \frac{d}{r}\right]$$

$$\Rightarrow \omega \gamma$$

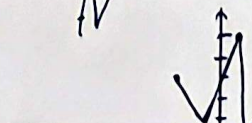
$$\Rightarrow$$



$$-\omega \gamma$$



$$\Rightarrow$$



$$R = [0, \omega]$$

$$\boxed{R = [0, \omega]}$$

معرفه

$$f(u) = \left| \frac{u+1}{2u+1} \right| \longrightarrow \left| \frac{u-1}{2(u-1)+1} \right| + 1 = \left| \frac{u-1}{2u-1} \right| + 1 = g(u)$$

(2) (6)

$$u + \left| \frac{u-1}{2u-1} \right| + 1 < 0$$

$$\frac{u-1}{2u-1} \leq -u-1$$

$$u-1 = -2u^2 + 2u + 1$$

$$2u^2 = 2 \quad \text{و } 0 < 2 \quad \text{و } 2 < 2$$

$$u^2 = 1 \rightarrow u = \pm 1$$

$$= (-\infty, -\sqrt{2})$$

