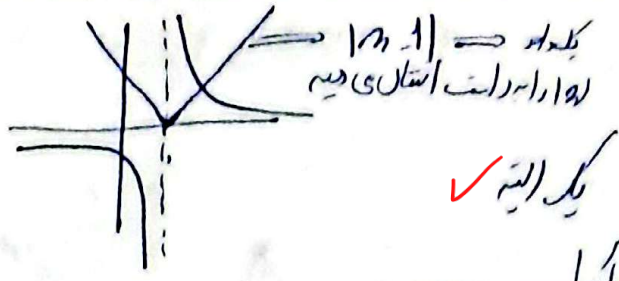


$\frac{1}{a-1} = |a-1|$ ۱۵

$\frac{1}{a-1}$ ۲

مشتق تابع در x=1



یک دایره ✓

سریعاً بنویس

الف) $\left| \frac{2x-1}{x} \right| < 2$

$\frac{2x-1}{x} < 2 \Rightarrow 2x-1 < 2x \Rightarrow -1 < 0$ ۱۵

از اینجا به بعد برابر

$\frac{2x-1}{x} > -2 \Rightarrow 2x-1 > -2x \Rightarrow 4x > 1 \Rightarrow x > \frac{1}{4}$

پس جواب $x > \frac{1}{4}$

نقطه $\frac{1}{4}$ را به دست آوریم

۹. $\frac{2x-1}{x}$

در x=1/4 به جواب تمام

در x=1/2 به جواب هیچ

ب) $\left| \frac{x-2}{2x+1} \right| > 1$

$\frac{x-2}{2x+1} > 1 \Rightarrow x-2 > 2x+1 \Rightarrow x < -3$ ۱

$\frac{x-2}{2x+1} < -1 \Rightarrow x-2 < -2x-1 \Rightarrow 3x < 1 \Rightarrow x < \frac{1}{3}$ ۲

① $\cup$ ② $\Rightarrow (-\infty, -3) \cup (-\infty, \frac{1}{3})$

$2x+1 \neq 0 \Rightarrow x \neq -\frac{1}{2}$

پس جواب $x < -3$ و $x < \frac{1}{3}$ و $x \neq -\frac{1}{2}$

جواب صفحه آخر

$x^2 < |x+6| \Rightarrow x^2 < x+6 \Rightarrow x^2 - x - 6 < 0$

$(x-3)(x+2) < 0$

$\Delta < 0$

پس جواب $x > 0$

$x^2 < x+6 \Rightarrow x^2 - x - 6 < 0$

$(x-3)(x+2) < 0$

پس جواب $x > 0$

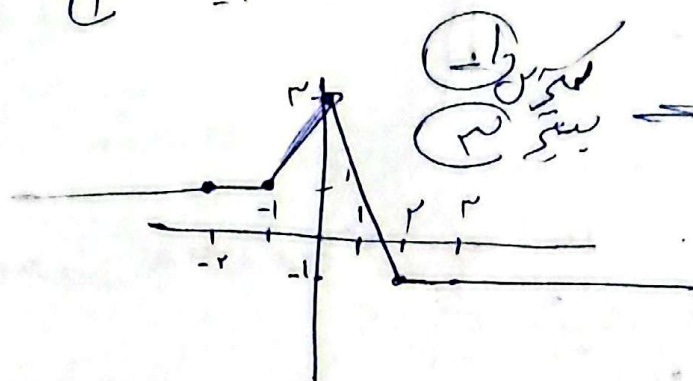
$x^2 < x+6 \Rightarrow x^2 - x - 6 < 0$

$(x-3)(x+2) < 0$

پس جواب $x > 0$

D1'

① ② - F - A

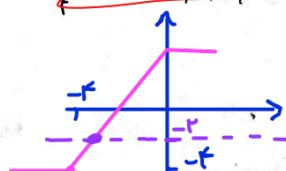


سید علی بن ابی طالب

$\Rightarrow \left\{ \begin{array}{l} \text{خارجی حد} = 1 - \frac{1}{1 + \frac{1}{2}} \\ \text{داخلی حد} = 1 - \frac{1}{1 + \frac{1}{2}} \end{array} \right.$

$$\left| \frac{1}{r} m + r \right| - 1 \leq \left| \frac{1}{r} m \right| - r \Rightarrow \frac{1}{r} m + r + 1 - m \leq \frac{1}{r} m + 1 - m \Rightarrow 2r - m \Rightarrow m \geq 2r$$

$x^2 \rightarrow$ مرتبة $|n+1| - |n| = -2$



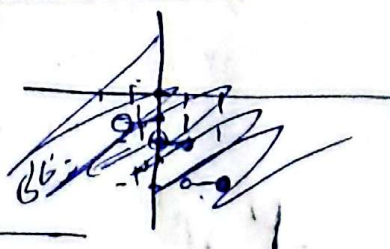
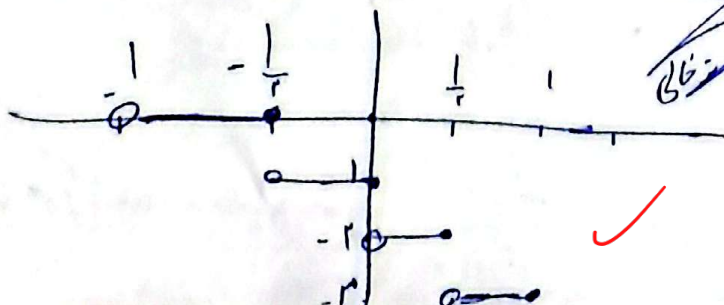
$$-\frac{\pi}{2} < x < 0$$

$$u + v + u = -v \rightarrow u = -v$$

$\Rightarrow P(x) = x^6 - x^5 - x^4 - x^3 + x^2 + x - 1$

$$\rightarrow \frac{1}{n} - \left[\frac{n+1}{n} \right] = \frac{1}{n} - 1 - \left[\frac{1}{n} \right] = \frac{1}{n} - \left[\frac{1}{n} \right] - 1 \Rightarrow R(f) = [-1, 0]$$

$$g = [-r_n]^{-1} \quad n \in \{1, \dots, l\}$$

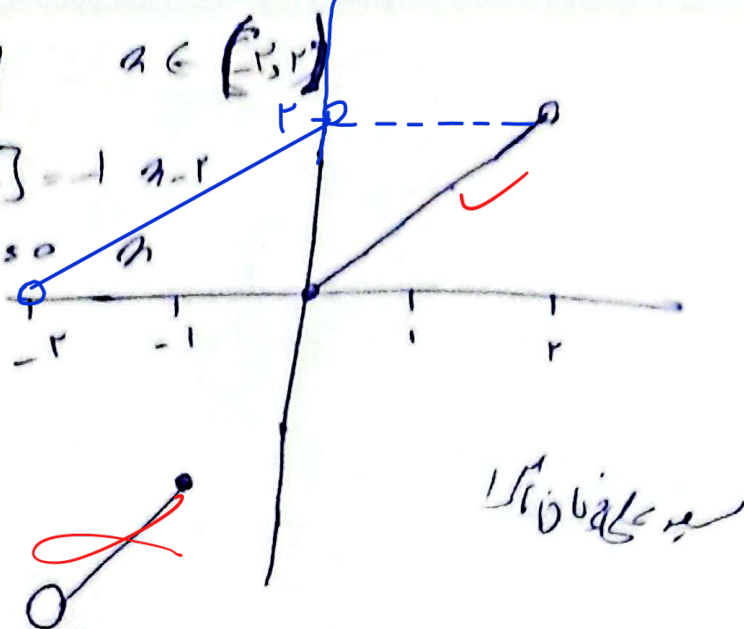


$x \in (0, \frac{1}{T}] \Rightarrow [-TA] = -1$
 $x \in (\frac{1}{T}, 1] \Rightarrow [-TA] = -2$
 $x \in [-\frac{1}{T}, 0] \Rightarrow [-TA] = 0$
 $x \in (-1, -\frac{1}{T}] \Rightarrow [-TA] = 1$

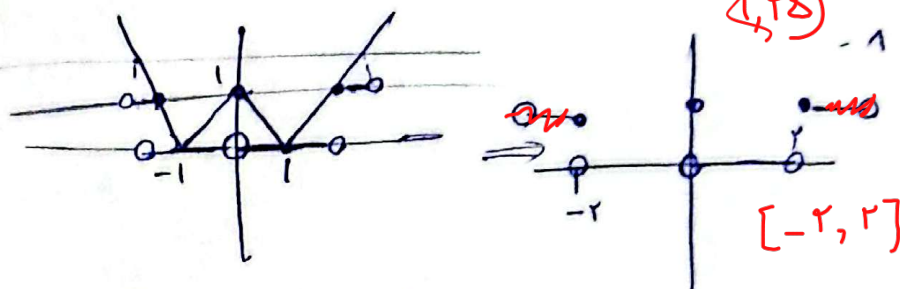
$$c = a - r \left[\frac{a}{r} \right] \quad a \in (-r, r)$$

$$m \in (-r, 0) \rightarrow \left[\frac{a}{r} \right] = -1 \quad a - r$$

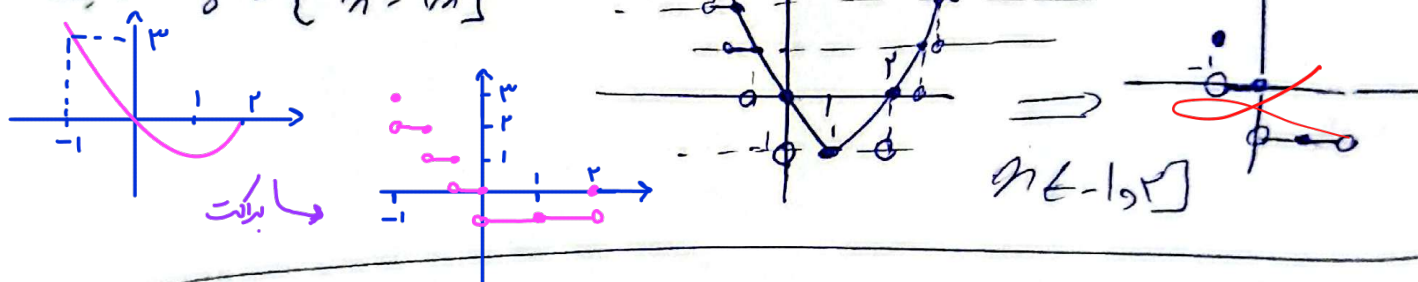
$$m \in [0, r) \rightarrow \left[\frac{a}{r} \right] = 0 \quad a$$



$$w) = [|a| - 1]$$



$$c) \quad s = [a^r - r a]$$



$$\begin{aligned} b - [a] \in \mathbb{R} \quad [b] - [a] \in \mathbb{Z} &\Rightarrow r[b] \in \mathbb{Z} \Rightarrow [b] \in \mathbb{Z} = \{0, 1, 2, \dots\} \\ a + [b] \in \mathbb{R} \quad [a] + [b] \in \mathbb{Z} &\Rightarrow [a] \in \mathbb{Z} = \{0, 1, 2, \dots\} \end{aligned}$$

$$(1 + \sqrt{r})^4, (1 + \sqrt{r})^4 \Rightarrow (1 + \sqrt{r})^4 = 1 + 4\sqrt{r} + 6r + 4r\sqrt{r} + r^2 = 1 + 4\sqrt{r} + 6r + 4r\sqrt{r} + r^2$$

$$(1 + \sqrt{r})^4 = 19r - (1 - \sqrt{r})^4$$

$$[(1 + \sqrt{r})^4] = [19r - (1 - \sqrt{r})^4] = 19r + [-(1 - \sqrt{r})^4] = 19r$$

$$\left| \frac{n-r}{r_{n+1}} \right| > 1 \quad n \neq -\frac{1}{r}$$

بـ

$$|n-r| > |r_{n+1}| \xrightarrow{\text{توالی}} n^r - r_{n+1}^r \geq r_{n+1}^r + r_{n+1}$$

$$r_{n+1}^r + 1 \cdot n - r < 0 \rightarrow \frac{-r}{+1} \quad \frac{1}{r} \quad \left(-r, \frac{1}{r} \right) - \left\{ -\frac{1}{r} \right\}$$