

۱- باقی‌مانده ریاضی بررسی کنید

$$\checkmark \begin{cases} y_1^3 = 2x_1^2 - 1 \\ y_2^3 = 2x_2^2 - 1 \end{cases} \xrightarrow{x_1^2 x_2^2} y_1^3 = y_2^3 \rightarrow y_1 = y_2 \quad \checkmark$$

$$\checkmark \begin{cases} y_1^3 + y_1 = 2x_1^2 - 1 \\ y_2^3 + y_2 = 2x_2^2 - 1 \end{cases} \xrightarrow{x_1^2 x_2^2} y_1^3 + y_1 = y_2^3 + y_2 \quad \checkmark$$

$$y_1^3 - y_2^3 + y_1 - y_2 = 0$$

$$(y_1 - y_2)(y_1^2 + y_1 y_2 + y_2^2 + 1) = 0$$

بمعنی

$$y_1 = y_2 \quad y_1 = -y_2 + \sqrt{-2y_2^2 - 1}$$

۲- با روش دلخواه

پایین صفت

$$\alpha \quad y = 2x^2 - 1 \quad y = 2x^2 - 1 \rightarrow x = \pm 1 \quad x \rightarrow \text{از این هر دو مقدار بگیر و بکن}$$

$$\checkmark |y| + xy = x^2 + 1 \quad x=0 \quad y = \pm 1 \quad x$$

$$\checkmark y^3 + x^3 = 2x - 1 \rightarrow \begin{cases} y_1^3 = 2x_1 - 1 - x_1^3 \\ y_2^3 = 2x_2 - 1 - x_2^3 \end{cases} \rightarrow y_1 = y_2$$

$$\checkmark \sqrt{y} + \sqrt{x} = 2 \rightarrow \begin{cases} y = (2 - \sqrt{x})^2 \\ y_2 = (2 - \sqrt{x_2})^2 \end{cases} \xrightarrow{\sqrt{x_1} = \sqrt{x_2}} y_1 = y_2$$

۳- حاصل عبارت

$$\tan \frac{\pi}{4} \rightarrow \frac{\sin \frac{\pi}{4}}{\cos \frac{\pi}{4}} \rightarrow \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = 1 \rightarrow \sqrt{3} \quad \checkmark$$

$$\cot \frac{\pi}{4} \rightarrow \frac{\cos \frac{\pi}{4}}{\sin \frac{\pi}{4}} \rightarrow \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = 1 \rightarrow \sqrt{3} \quad \checkmark$$

$$\tan 330 \rightarrow \frac{\sin 330}{\cos 330} \rightarrow \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} = -\frac{1}{\sqrt{3}} \rightarrow \sqrt{3} \quad \checkmark$$

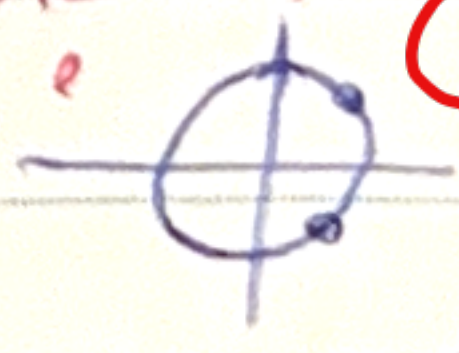
$$\cot 110 \rightarrow \frac{\cos 110}{\sin 110} \rightarrow \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} = -\frac{1}{\sqrt{3}} \rightarrow \sqrt{3} \quad \checkmark$$

$$\frac{\cos 110}{\sin 110} = -\frac{1}{\sqrt{3}} \quad \checkmark$$

۴- چقدری است

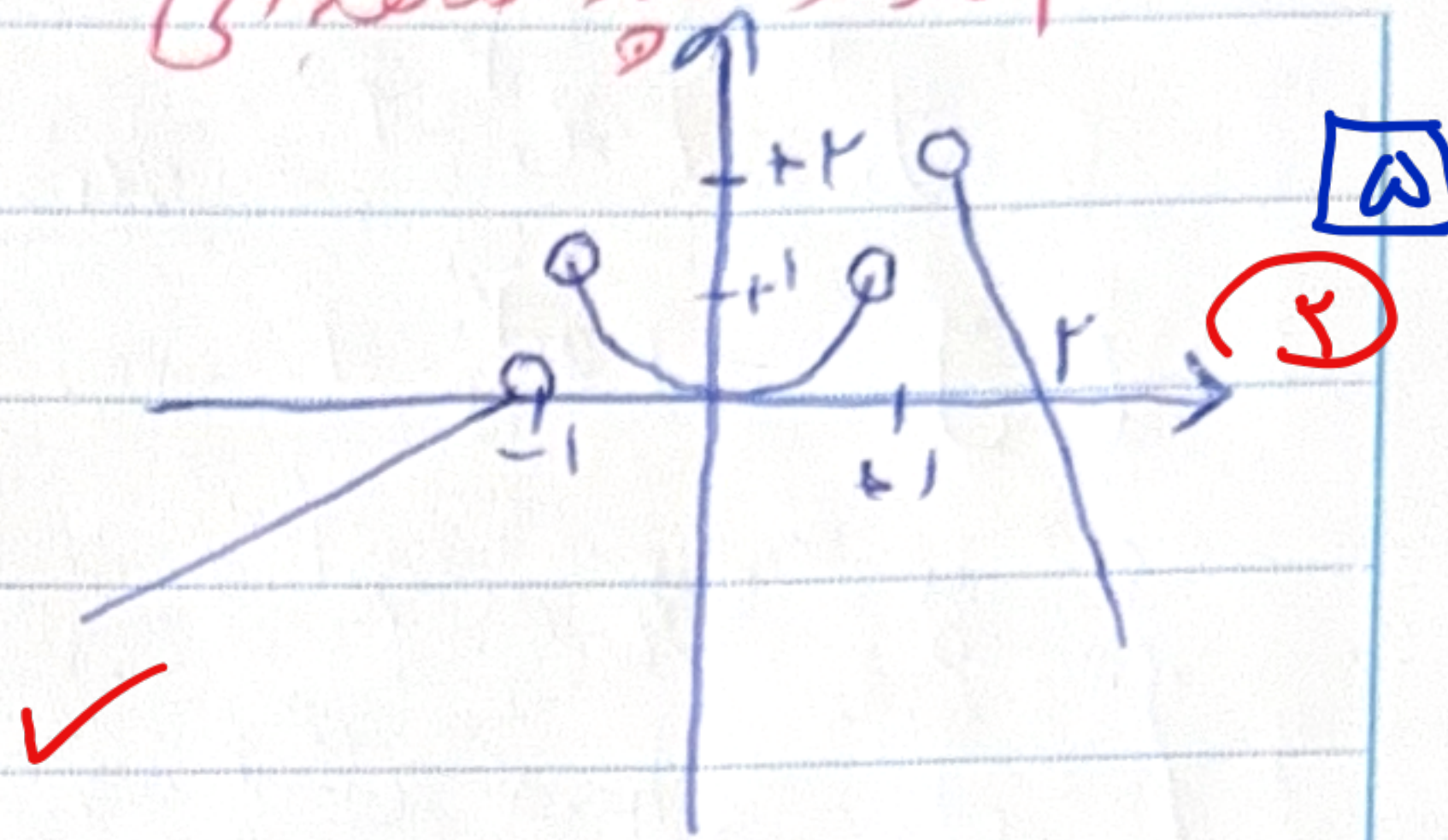
$$\sin \alpha = \frac{1}{\sqrt{2}} \quad \left\{ 2k\pi + \frac{\pi}{4}, 2k\pi + \frac{3\pi}{4} \right\} \cos \alpha = \frac{\sqrt{2}}{2}$$

$$\alpha = \left\{ 2k\pi + \frac{\pi}{4}, 2k\pi + \frac{3\pi}{4} \right\}$$

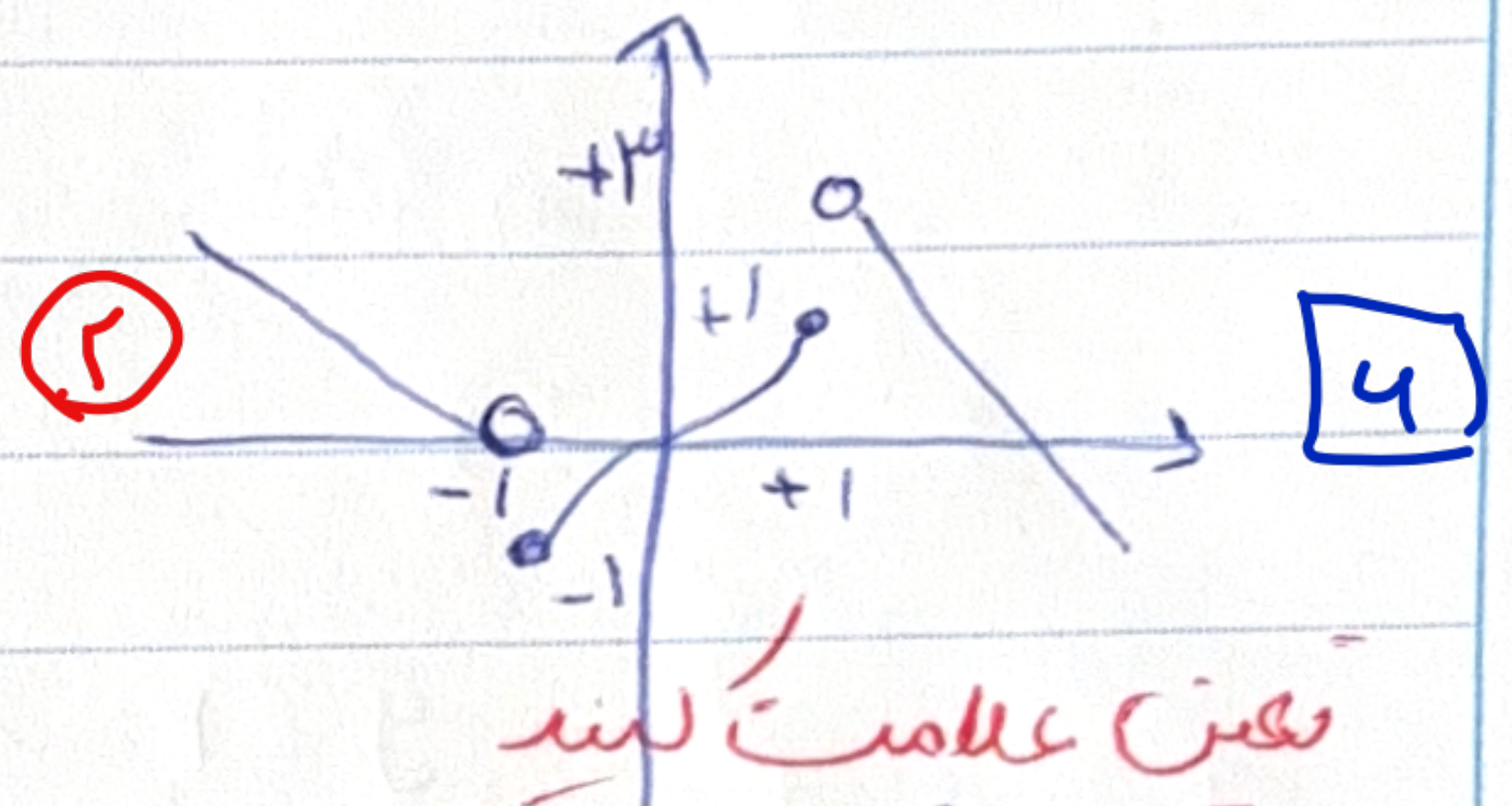


رسم نمودار چند ضلعی ای

$$f(x) = \begin{cases} -2x+1 & x > 1 \\ x^2 & -1 < x < 1 \\ x+1 & x < -1 \end{cases}$$



$$f(x) = \begin{cases} -x+1 & x > 1 \\ x^3 & -1 < x < 1 \\ -x-1 & x < -1 \end{cases}$$



$$\frac{(x-1)(x-2)}{x-1} \quad \frac{(x-1)(x-2)^2}{x-1} \quad \frac{(x-1)(x-2)^3}{x-1}$$

$$\frac{x^2+x+1}{x^2+x+1} \quad \frac{x^2+x+1}{x^2+x+1} \quad \frac{x^2+x+1}{x^2+x+1}$$

$$\frac{(x-1)(x-2)}{x-1}$$

$$\frac{x^2+x+1}{x^2+x+1}$$

$$\frac{(x-1)(x-2)^2}{(x-1)^2}$$

$$\frac{x^2+x+1}{x^2+x+1}$$

$$\frac{x^2-2x+1}{x-1} \rightarrow -1$$

$$\frac{-1}{x-1} \rightarrow +1$$

$$\frac{x^2-2x+1}{x^2-2x+1} \rightarrow +1$$

$$\frac{1}{x^2-2x+1} \rightarrow +1$$

$$\frac{+1}{+1}$$

پاسن لسی

1

DATE

/ /

Subject:

$$\frac{n^x - n^y}{n^x + n + y} \Rightarrow \frac{n^y (n^x - 1)}{n^x + n + y}$$

$\rightarrow 0^*$ $\rightarrow \bar{1}$

$$\frac{-1 \quad 0^* \quad +1}{+ \quad 0 \quad - \quad 0 \quad - \quad 0 \quad +}$$

10

1,25

$$\frac{n^y + y n + x}{n^y + y n + y} \Rightarrow \frac{n^y + y n + x}{n^y + y n + y}$$

$\rightarrow \Delta < 0$ $\rightarrow + \quad 0 \quad / \quad \Delta$

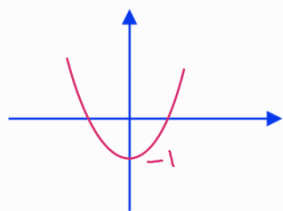
 $\rightarrow$
 $\Delta < 0$

پہلے!

برای این سوالا یا باید سطح بلد باشی

یا تعریف تابع

تابع است.



(الف) $y = x^2 - 1$

(الف) $y = \frac{x^3 - 3x + 2}{x - 3}$

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

$\xrightarrow{-2}$ (x-1)²
 $\hookrightarrow 3$

۳ و -۲ $\Rightarrow$ ریشه‌ها

