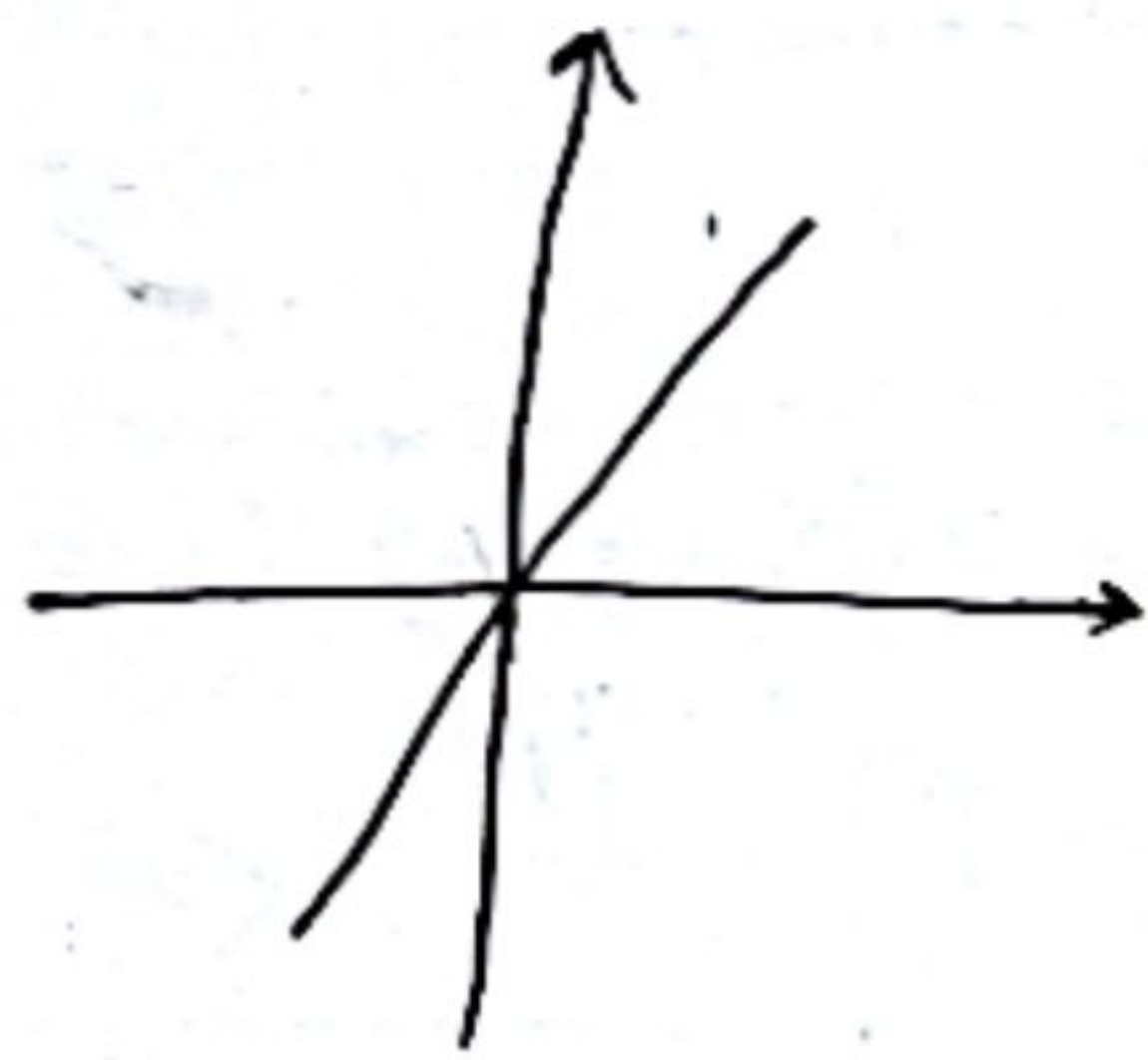


الف) $\begin{cases} y_1^3 = 2x_1^2 - a_1 \\ y_2^3 = 2x_2^2 - a_2 \end{cases} \xrightarrow{a_1=a_2} y_1^3 = y_2^3 \Rightarrow y_1 = y_2 \checkmark$

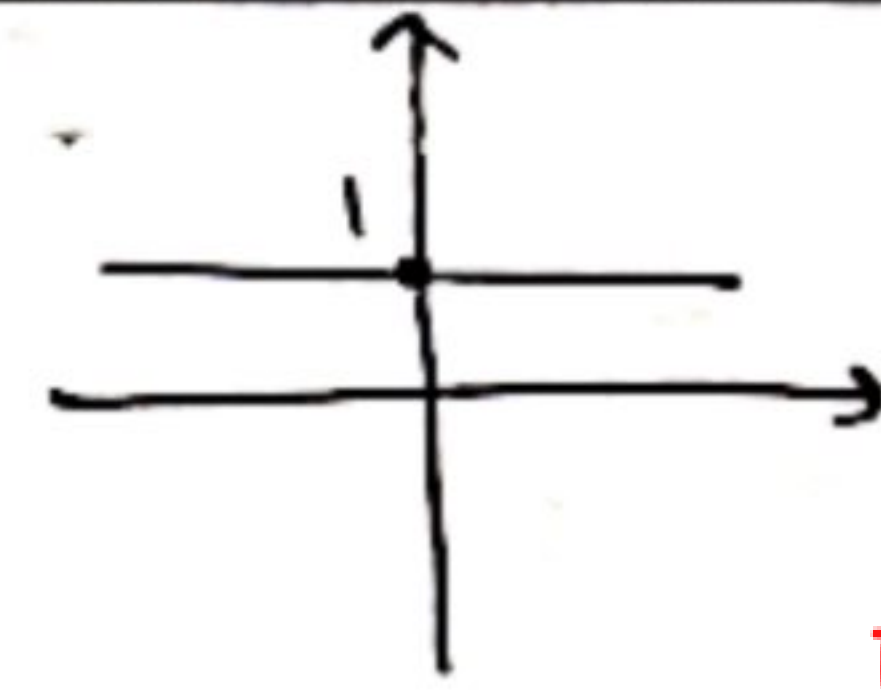
ب) $n=0 \Rightarrow |a|=3 \Rightarrow y=\pm 3 \times$

ج) $\sqrt{x-4}=0 \Rightarrow x=4$
 $|y-2|=0 \Rightarrow y=2 \Rightarrow \checkmark$

د) $n=0 \Rightarrow \cos y=0 \Rightarrow y=\frac{\pi}{2} \text{ و } \frac{3\pi}{2} \dots \times$



ب) $y=2x+b$
 $0=2 \cdot 0+b \Rightarrow b=0$
 $\Rightarrow y=2x$



الف) $y=1$

$m = \frac{-b}{a} = \frac{-a}{1} = -a$

$\Rightarrow a = -4$

$1 = 4 + \frac{2(-4)}{-1} + b$

$\Rightarrow b = -5 \Rightarrow a+b = -9$

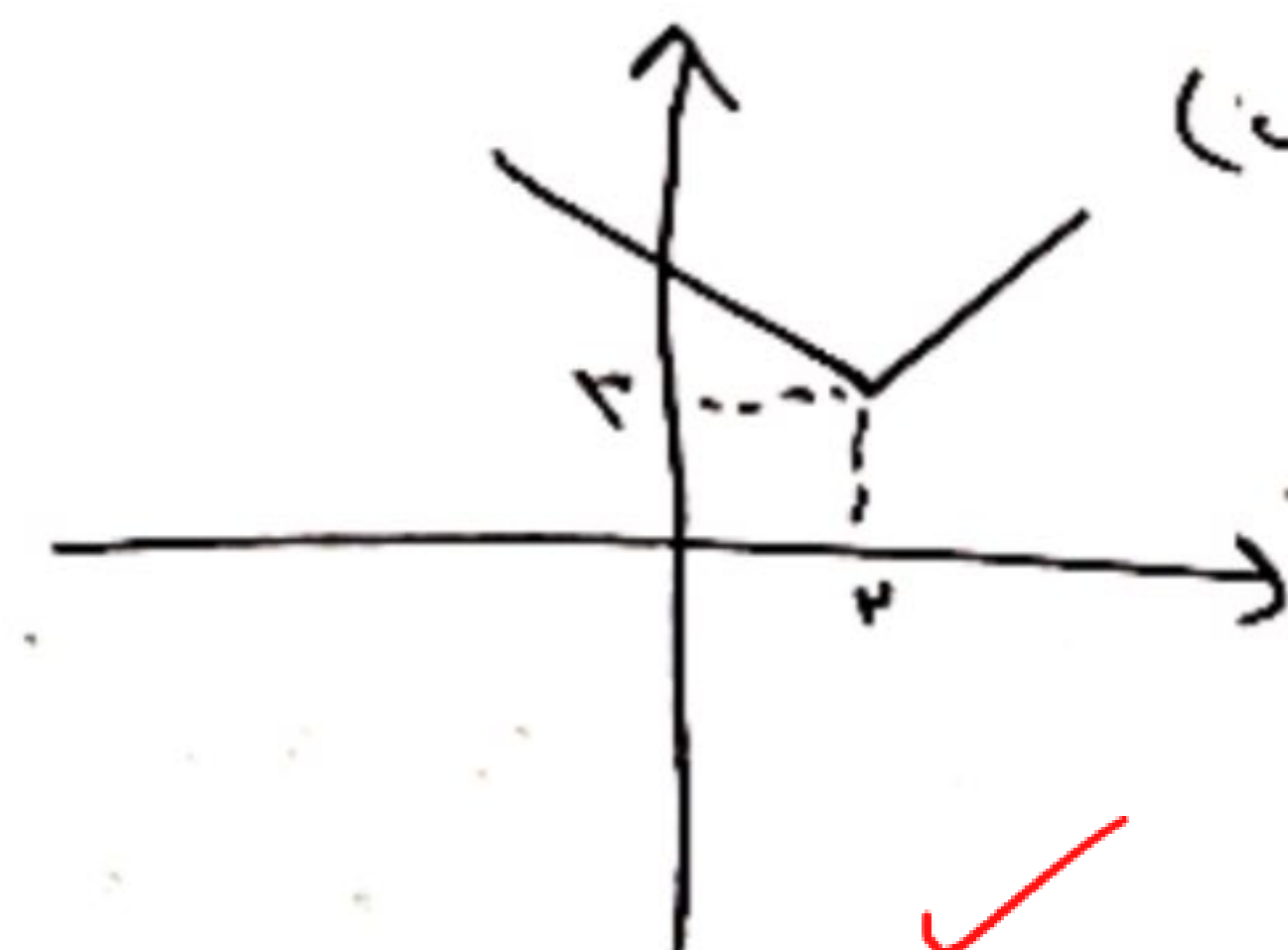
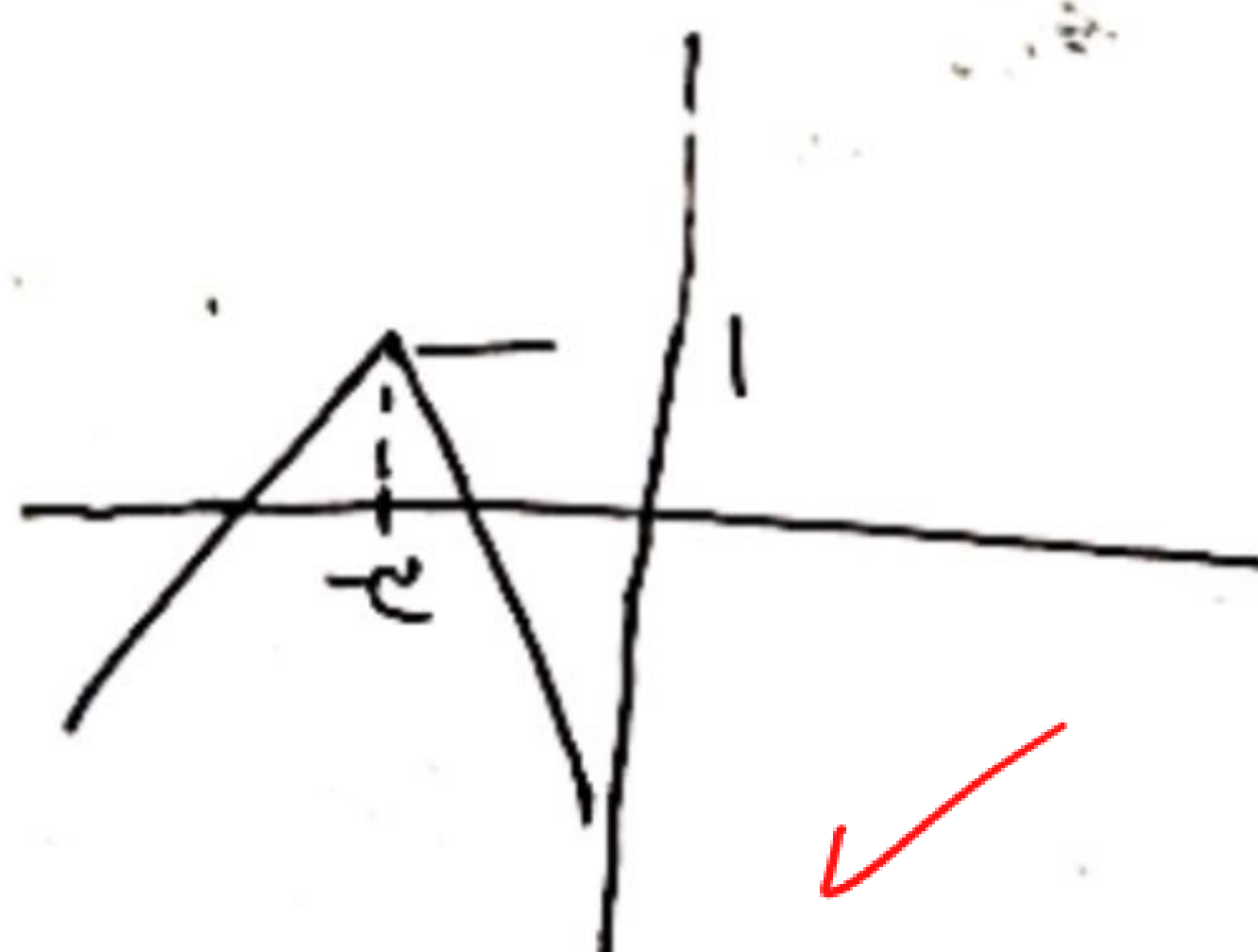
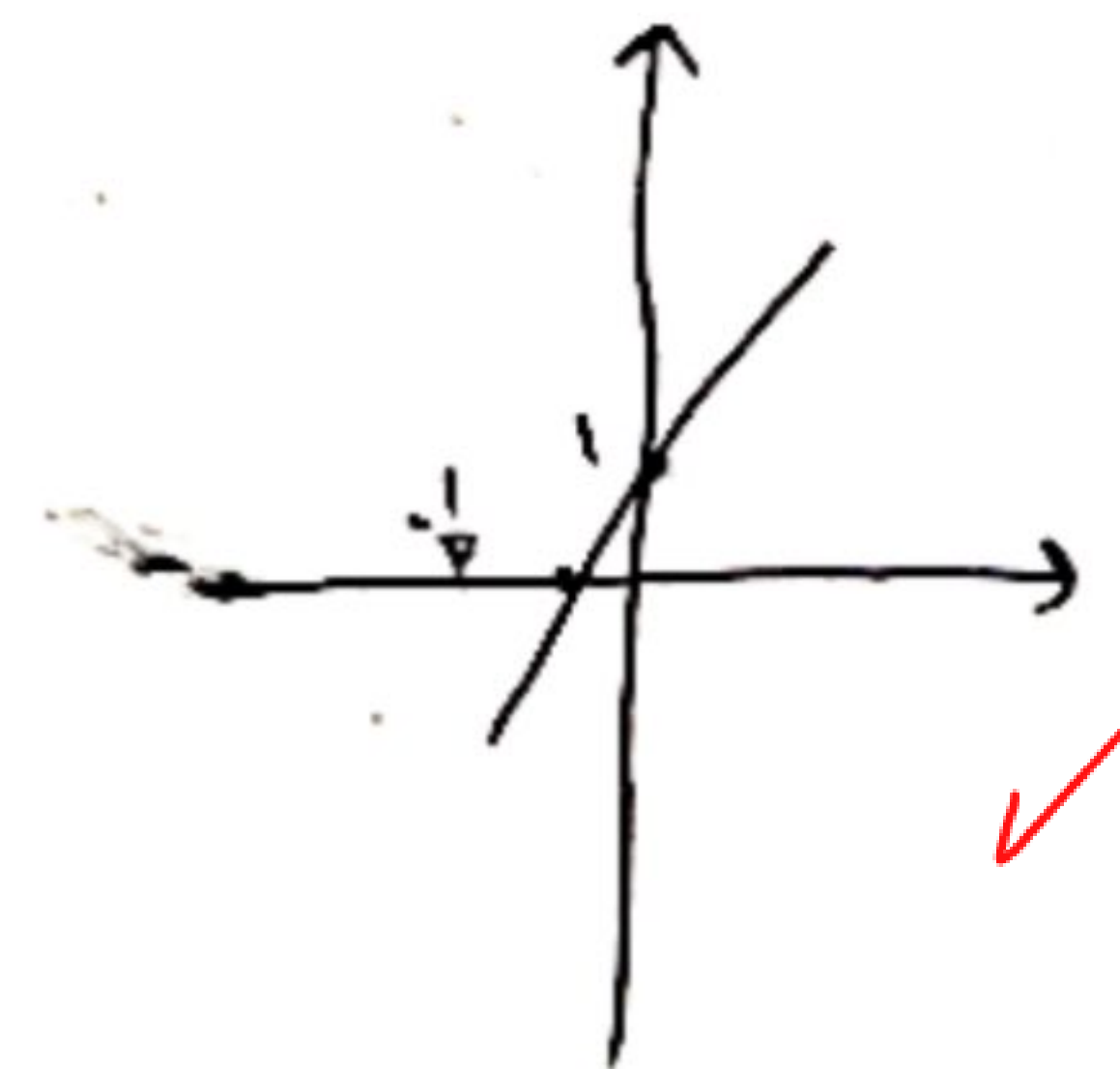
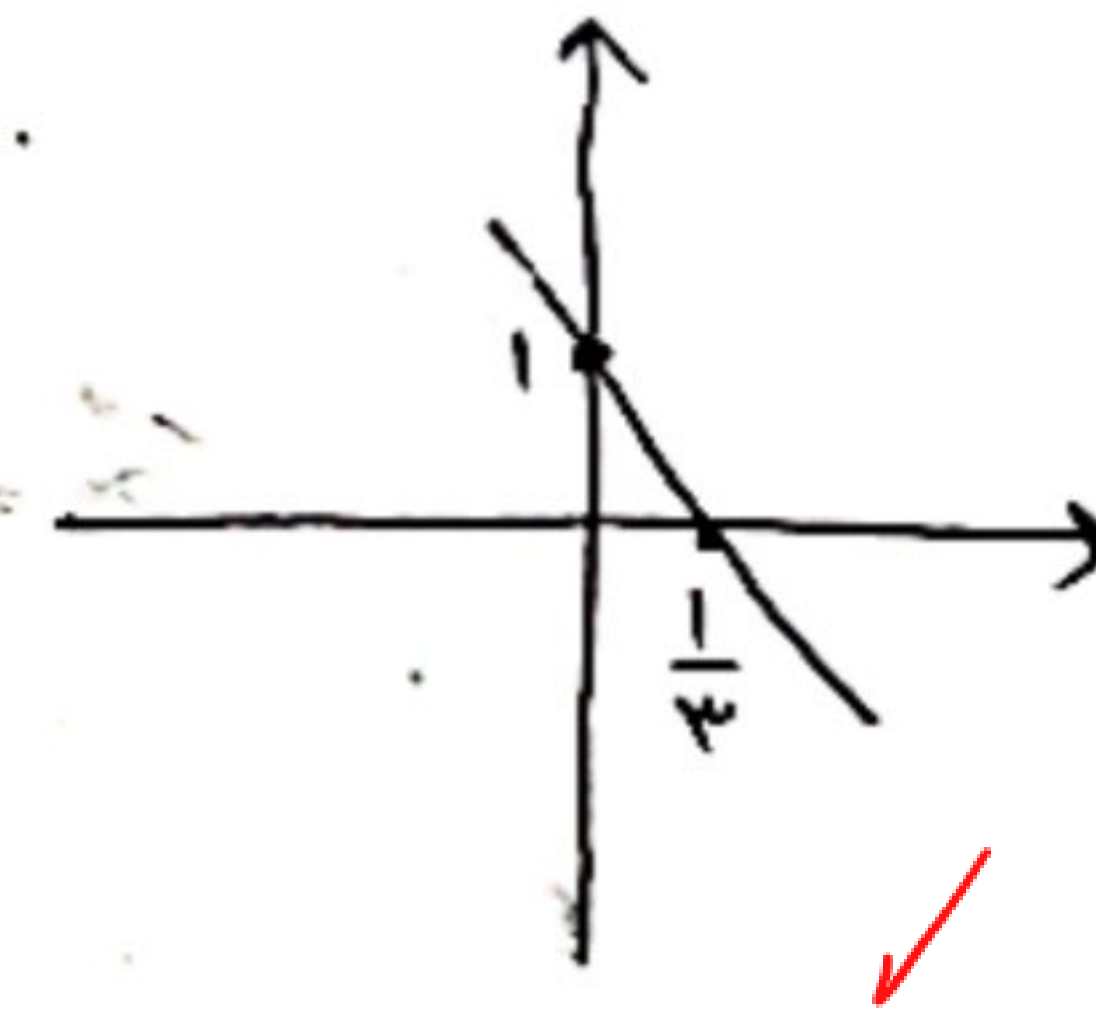
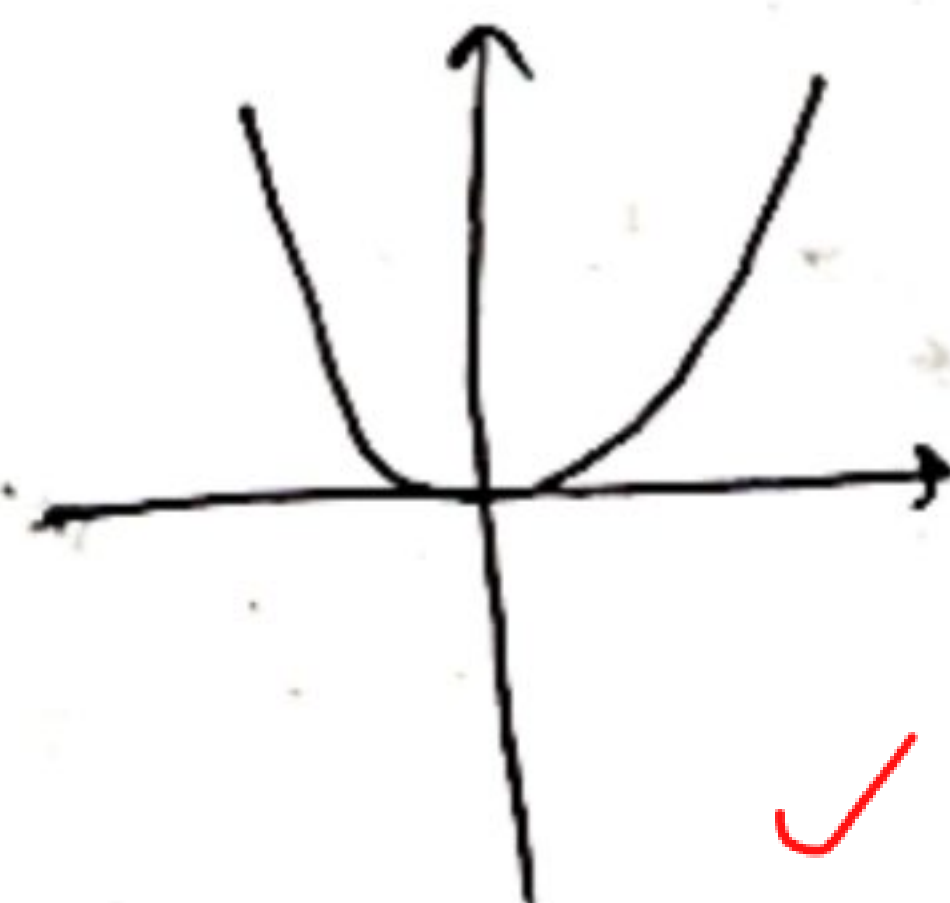
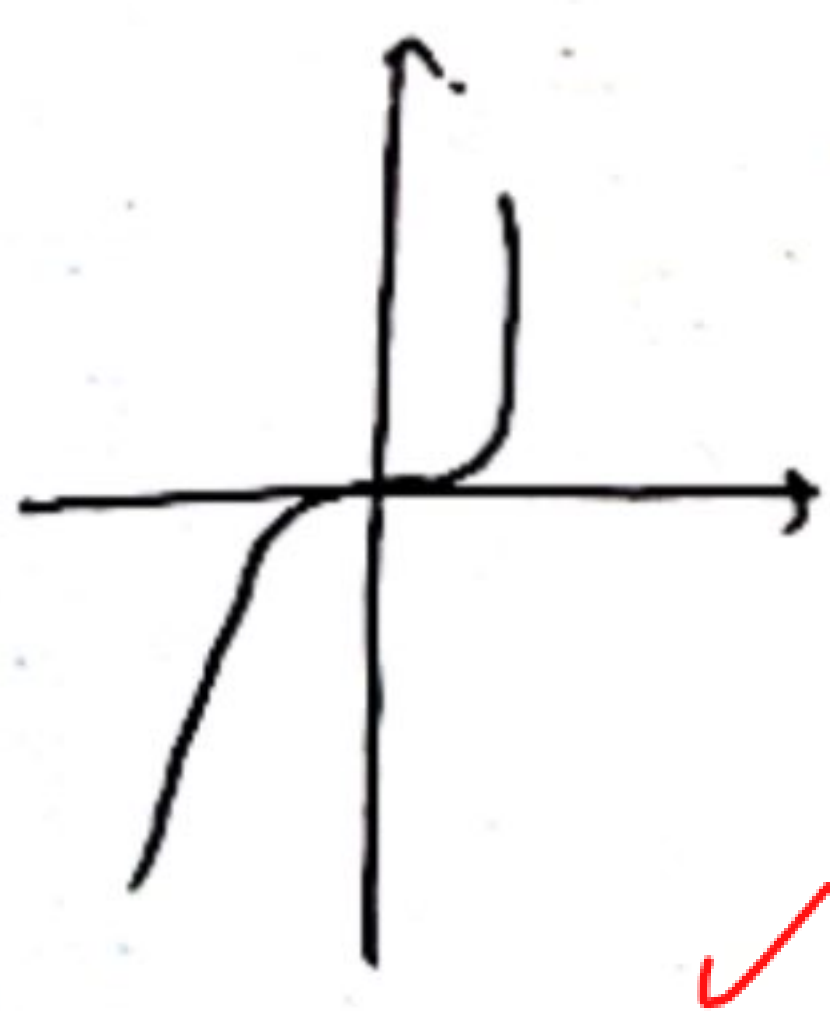
ب)

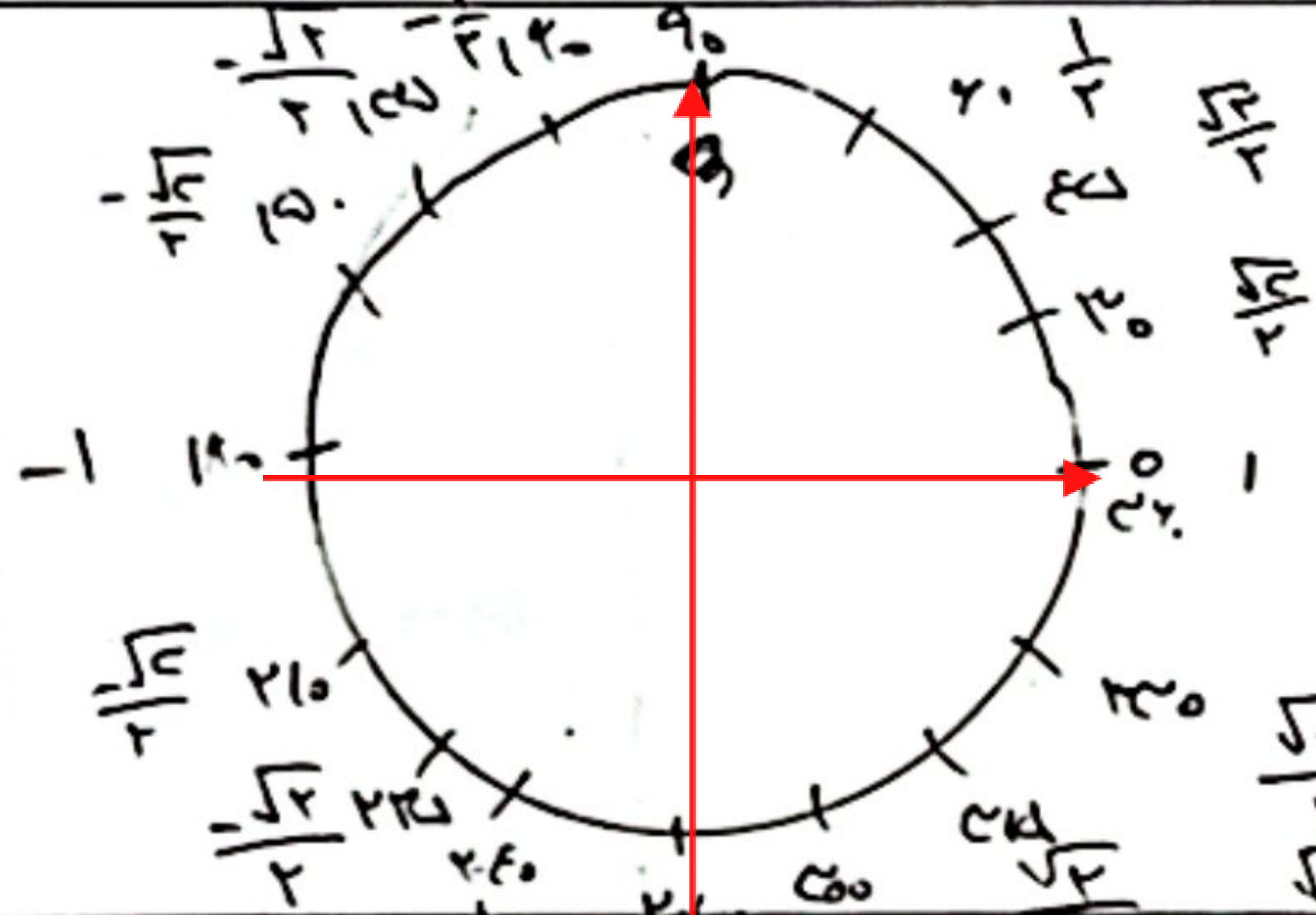
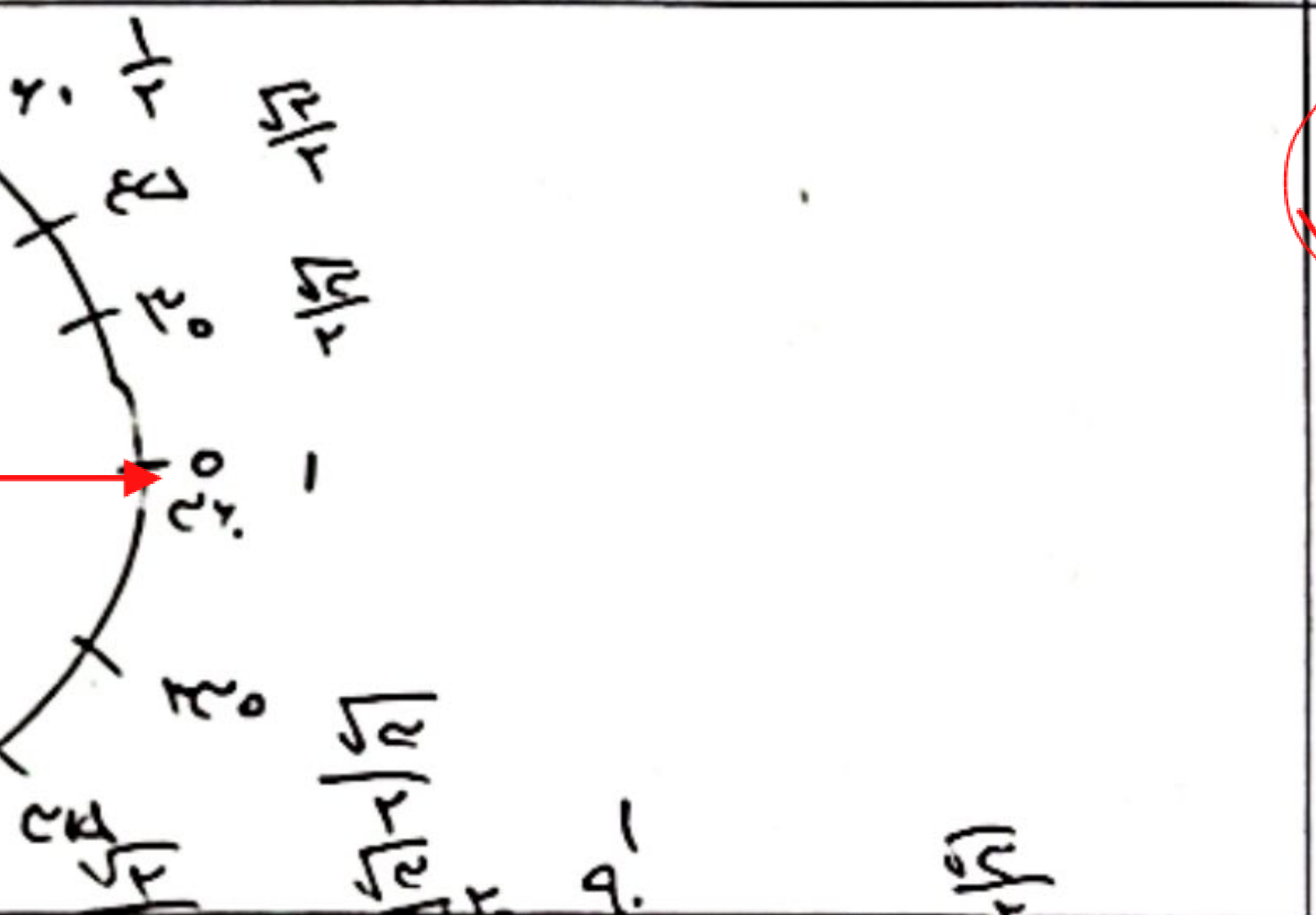
$y=x$

$\Rightarrow x=mx+b$

~~$x=mx+b$~~

$\begin{cases} a=1, b=0 \\ \Rightarrow a+b=1 \end{cases}$



$\Delta < 0$ $\Rightarrow D = \mathbb{R}$ ✓	(ج) $a(n-1) \neq 0$ (الف) $\Rightarrow n \neq 0, n \neq 1$ $\Rightarrow D = \mathbb{R} - \{0, 1\}$ ✓ $\Delta < 0 \Rightarrow a \neq 0$ (ب) $\Rightarrow D = \mathbb{R}$ ✓	٢ ٦
$a^2(a^2-1) \neq 0$ $\Rightarrow a^2 \neq 0, a \neq \pm 1$ $\Rightarrow D = \mathbb{R} - \{0, \pm 1\}$	(ج) $4-n \geq 0$ (الف) $\Rightarrow n \leq 4$ $n-2 \geq 0 \Rightarrow n \geq 2$ $\Rightarrow D = [2, 4]$ ✓ $a^2 \geq 0, n \geq 0$ (ب) $\Rightarrow a^2 + n \geq 0$ $\Rightarrow D = \mathbb{R} - \{0\}$ ✓	٢ ٧
		١, ٧, ٨ ٨
$\sin n = -\frac{\sqrt{3}}{2}$ ✓ $n = \left\{ \frac{4\pi}{3}, \frac{5\pi}{3} \right\}$	$\sin n = \frac{1}{2}$ (الف) $\Rightarrow n = \left\{ \frac{\pi}{6}, \frac{5\pi}{6} \right\}$ ✓	١, ٧, ٩ ٩
$\sin n = -\frac{\sqrt{3}}{2}$ ✓ $n = \left\{ \frac{4\pi}{3}, \frac{5\pi}{3} \right\}$	$\sin n = \frac{1}{2}$ (الف) $\Rightarrow n = \left\{ \frac{\pi}{6}, \frac{5\pi}{6} \right\}$ ✓	٢ ١٠