

$$P = \{(1, 4a), (1, a^2+3), (2, 3a)\} \Rightarrow 4a = a^2+3 \Rightarrow a^2-4a+3=0$$

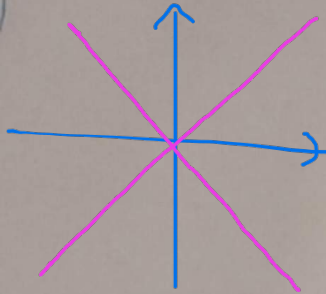
$$(عوامل مشترک) \Rightarrow (a-1)(a-3)=0 \Rightarrow a = \begin{matrix} 1 \\ 3 \end{matrix}$$

✓ (۲)

الف) $|y| = |x|$

$y = \pm x$

تابع نیت

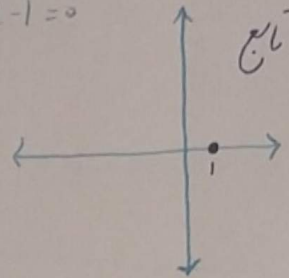


ب) $|y| + \sqrt{x-1} = 0$

$|y| = 0 \Rightarrow y = 0$

$\sqrt{x-1} = 0 \Rightarrow$

$x-1 = 0 \Rightarrow x = 1$



الف) $|y-1| = \sqrt{x-2}$ $x=3 \Rightarrow |y-1| = \sqrt{3-2} = 1$

$|y-1| = 1 \Rightarrow |y-1| = 1 \Rightarrow y-1 = 1 \text{ یا } y-1 = -1$

$y = 2 \text{ و } y = 0$

تابع نیت

ب) $y^5 - y = \frac{x^2}{4} \Rightarrow x=0 \Rightarrow y(y^4-1) = \frac{x^2}{4} \Rightarrow$

$y(y^2-1)(y^2+1) = 0 \Rightarrow y = 0 \text{ و } y = \pm 1$

تابع نیت

ج) $\sin^2 x + \cos^2 y = 1 \Rightarrow \cos^2 y = 1 \Rightarrow$

$\cos^2 y = 1 \Rightarrow \cos y = \pm 1 \Rightarrow y = 0, \pi$

تابع نیت

د) $2xy = x \Rightarrow x=0 \Rightarrow 2(0)y = 0$

$y = 1R$

تابع نیت

الف) $x^2 + |y-1| = 4x \Rightarrow x=1 \Rightarrow$

$1 + |y-1| = 4 \Rightarrow |y-1| = 3 \Rightarrow y-1 = 3 \text{ یا } y-1 = -3$

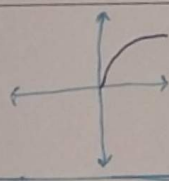
$y = 4 \text{ یا } y = -2$

تابع نیت

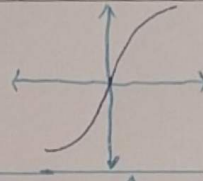
ب) $y^5 + 3x = 0 \Rightarrow y^5 = -3x \Rightarrow x = 0 \text{ یا } y = \sqrt[5]{-3x}$

تابع نیت

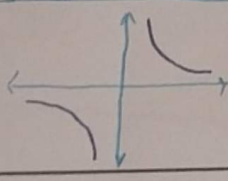
الف) $y = \sqrt{x}$



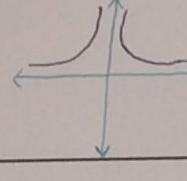
ب) $y = \sqrt[5]{x}$



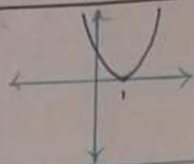
ج) $y = \frac{1}{x^3}$



د) $y = \frac{1}{x^4}$

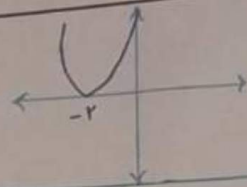


الف) $y = (x-1)^2$



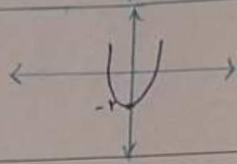
✓ (5)

ب) $y = (x+2)^2$

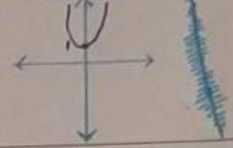


6

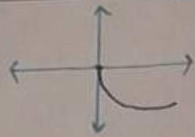
ج) $y = x^2 + 1$



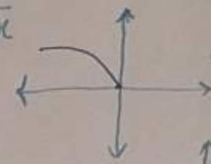
د) $y = x^2 + 1$



الف) $y = -\sqrt{x}$

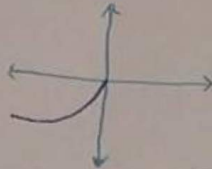


ب) $y = \sqrt{-x}$

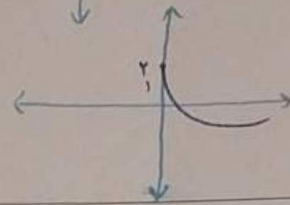


7

ج) $y = -\sqrt{-x}$

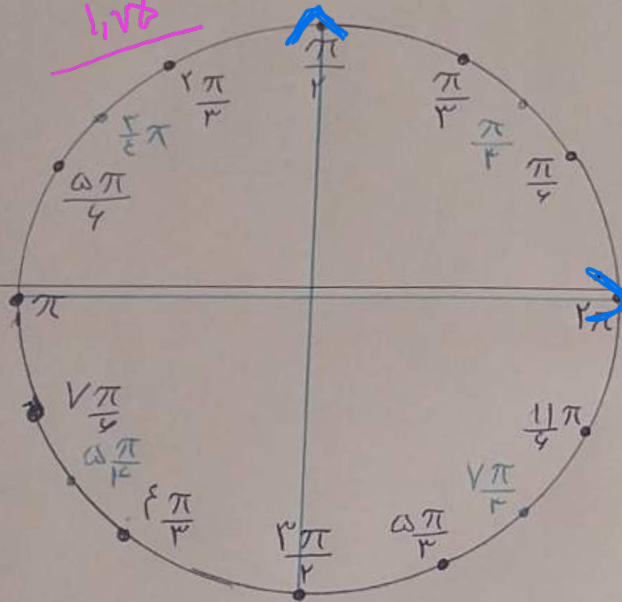


د) $y = \sqrt{x+2}$



✓ (5)

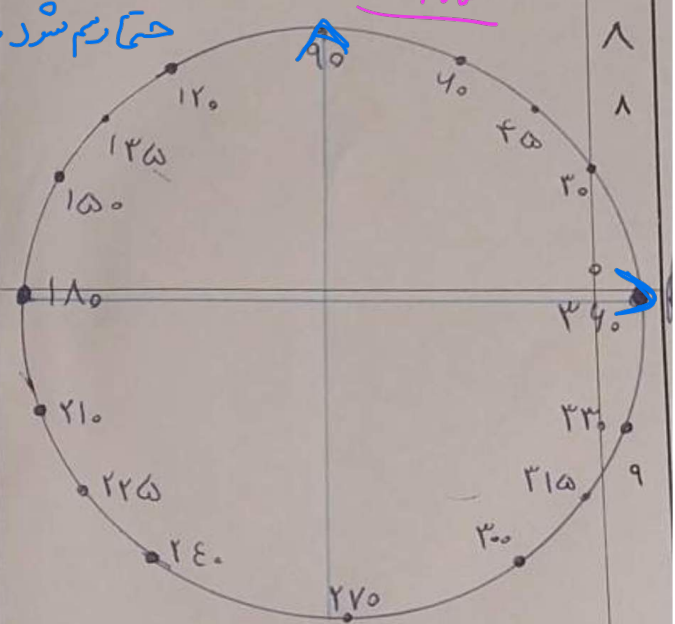
1,75



9

حتمی نم شود.

1,75



8

الف) $\cos 120^\circ \rightarrow -\frac{1}{2}$

✓ (5)

ب) $\sin 150^\circ \rightarrow \frac{1}{2}$

ج) $\cos \frac{5\pi}{6} \rightarrow -\frac{1}{2}$

د) $\sin \frac{11\pi}{6} \rightarrow -\frac{1}{2}$

10