

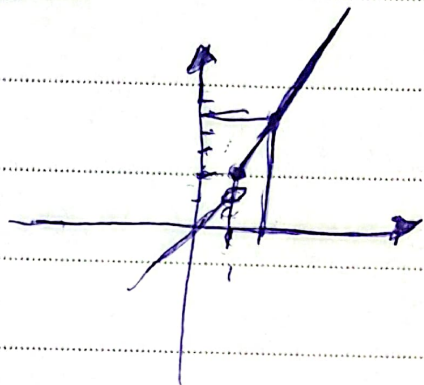
① الف) $n^2 - n = 2 \Rightarrow n^2 - n - 2 = 0 \Rightarrow (n-2)(n+1) = 0$

$n = \boxed{2}$ ~~و~~ $n = \boxed{-1}$
غیرممکن

ب) $m = 2 \Rightarrow m-1 = 2-1 = 1 \Rightarrow a = \boxed{-1}$ $-1+2 = 1$

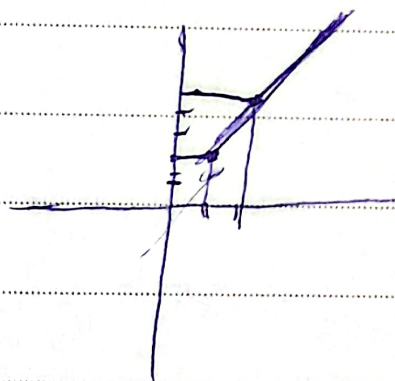
$\Rightarrow \boxed{n=2}$

②



$1+a < 2 \Rightarrow a < 1$

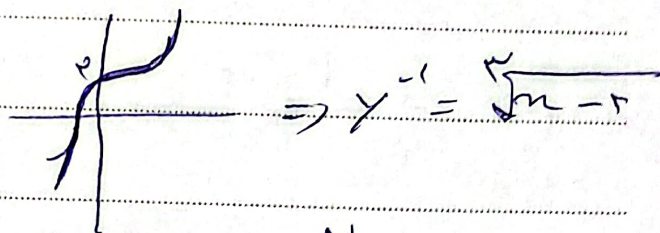
③



$a > 0, a-1 < 2 \Rightarrow a < 3$

$\Rightarrow a \in [0, 3)$

④ الف) $y = x^2 + 2 \Rightarrow$

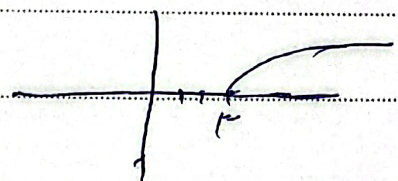


ب) $y = x^2 - 2x + 2 = (x-1)^2 + 1$ $\Rightarrow$ ~~میدان~~ ~~نمیست~~

⑤ الف) $y = \frac{2x+1}{x-2} \Rightarrow$ ~~همواره~~ ~~گراف~~ ~~است~~ ~~و~~ ~~یک~~ ~~به~~ ~~یک~~ ~~است~~

$\frac{2y+1}{y-2} = x \Rightarrow y-1 = \frac{2x+1}{x-2}$

ب) $y \leq 2 \Rightarrow$ اصلی و کج

ج) $y = \sqrt{x-2}$  $\Rightarrow$ یک تکیه است

$y^{-1} = x^2 + 2 \Rightarrow x \in [0, +\infty)$

د) $y = x^2 - 4x + 2, x \in [2, +\infty)$

$\frac{-b}{2a} = \frac{4}{2} = 2 \Rightarrow$ $\text{در این بازه یک جیوه است}$

$y = x^2 - 4x + 2 = (x-2)^2 - 2 \Rightarrow \sqrt{y+2} + 2 = x$

$\Rightarrow y^{-1} = \sqrt{x+2} + 2$

ه) $y = x + \sqrt{x} = (\sqrt{x})^2 + \sqrt{x} + \frac{1}{4} - \frac{1}{4}$

$= (\sqrt{x} + \frac{1}{4})^2 - \frac{1}{4} \Rightarrow y^{-1} = \sqrt{x + \frac{1}{4}} - \frac{1}{4}$

$a=0, b=-\frac{1}{4}, c=\frac{1}{4} / -1-1 = -2$

د)

$\left(\frac{x_1}{\sqrt{x_1^2 - 2}} - \frac{x_2}{\sqrt{x_2^2 - 2}} \right)^2 = \frac{x_1^2}{x_1^2 - 2} = \frac{x_2^2}{x_2^2 - 2}$

$\frac{x_1^2}{x_1^2 - 2} = \frac{x_2^2}{x_2^2 - 2} \Rightarrow x_1^2 = x_2^2$

$x_1 = \pm x_2$

— Arman —

که به هم قیاس

Subject: ()

Date:

$$\frac{n}{\sqrt{x^r - 1}} = y \Rightarrow \frac{n^r}{n^r - 1} = y^r$$

$$\frac{y^r}{y^r - 1} = n^r \Rightarrow y^r = \sqrt{\frac{r n^r}{n^r - 1}}$$

$$\textcircled{9} \quad \sqrt{n} = \frac{-r}{a} + 1 \Rightarrow \sqrt{n} = \frac{r}{a} \Rightarrow n = \frac{a^2}{r^2}$$

$$\Rightarrow g^{-1}\left(\frac{-r}{a}\right) = \frac{a}{r^2}$$

$$\frac{n}{1+|x|} = -\frac{r}{a} \Rightarrow -a n = r + |x| \Rightarrow -a n - |x| = r$$

$$x < 0 \quad -r a = r \Rightarrow n = \frac{-1}{r}$$

$$x > 0 \quad -r x = r \Rightarrow n = \frac{-1}{r} \quad \text{556}$$

$$\frac{a}{r^2} + \frac{-1}{r} = \frac{n - r a}{a^2} = \frac{-1}{a^2}$$

$$b) f(x) = x^r + 1 \Rightarrow g(x) = x^r + 1 + \sqrt{x^r + 1}$$

$$11 = x^r + 1 + \sqrt{x^r + 1} = 1 + \sqrt{9} = 11 \Rightarrow x = \textcircled{5}$$

$$1 + r$$

— Arman —