

17

محل

110

الف) $g^p = p\alpha^p + p\alpha - 1$, $g^p = p\alpha^p + p\alpha - 1$, $g^p = p\alpha^p + p\alpha - 1$
 $g^p = g^p \Rightarrow g = g$ با ایت

111

ب) $\alpha \cos y = y \cos \alpha$ $\alpha = 0 \rightarrow \mathbb{R}_g = \mathbb{R}$

112

مثال $\alpha = 0$
 $y \in \mathbb{R}$
 نقاط y را در صده
 مثال نقض x



مثال نقض $\alpha = \frac{\pi}{2}$
 y صده نباری
 را اضیاری کند. تا جلد

ج) $\alpha + y = \sqrt{\alpha y}$ $p\sqrt{\alpha y} = \alpha + y \Rightarrow \alpha + y - p\sqrt{\alpha y} = 0 \Rightarrow (\sqrt{\alpha} - \sqrt{y})^p = 0$
 $\Rightarrow \sqrt{\alpha} = \sqrt{y} \Rightarrow \alpha = y$

د) $\alpha y^p + p\alpha - y^p - py = 0$ $\alpha(y^p + 1) = y^p + py \Rightarrow \alpha(y^p + 1) = y(y^p + 1) \Rightarrow \alpha = y$

113

$p\alpha^p - b$ $|\alpha - 1| \gg p \Rightarrow \alpha - 1 \gg p$ $\alpha \gg p^p \Rightarrow \alpha = -1 \rightarrow p - b \Rightarrow p - b - \alpha - p$
 $\alpha - 1 \ll -p$ $\alpha \ll -1$ $\rightarrow a - p$ $a + b = p$

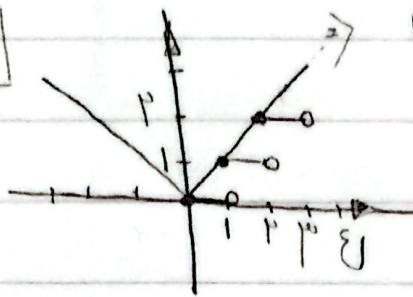
114

$f(\alpha) \sqrt{a - b\alpha - \alpha^p} = \sqrt{-(\alpha^p + b\alpha - a)}$ $-a^p + a - b\alpha = 0$ $-a + 1 - b = 0 \Rightarrow a = 1 - b$
 $-b^p + a - b^p = 0 \Rightarrow b^p = a$
 $b^p = 1 - b \Rightarrow p b^p + b - 1 = 0$
 $b = \frac{-1 \pm \sqrt{1 + 1}}{p} = \frac{-1 \pm p}{p} = \frac{-1}{p}$
 $b^p + 1 - b = 0 \Rightarrow b = -1 \Rightarrow a + b = 0$
 $b = \frac{1}{p} \Rightarrow \frac{1}{p} + \frac{1}{p} = \frac{2}{p}$
 $[b, a] \Rightarrow b < a \Rightarrow a = p$ $[-b, p] \Rightarrow p - 1 = 1$
 $a + b =$
 $a = 1 - \frac{1}{p} = \frac{p-1}{p}$

115

$ax^2+bx+c=0$ $a=1 \Rightarrow 1x^2+1bx+c=0 \Rightarrow b+c=0 \Rightarrow -b=c$
 $-1-D_f(-\infty, 1) \Rightarrow a < 0$
 $\Delta = b^2 - 4ac = 0$ $a=0$ $\Rightarrow$ $b+c=0 \Rightarrow -b=c$
 $\Rightarrow -b/c = 1 \Rightarrow a = -b/c \Rightarrow b/c = 0$
 $b/c + c = 0 \Rightarrow c - c/b = 0$
 $c(1 - 1/b) = 0$

$|a| - |b| \neq 0$ $|a| \neq |b|$



$D_f = \{x \mid x \geq 1\}$

$D_f = R - W$

$f(x) = \sqrt{x} + \sqrt{y} = 9$

$\sqrt{x} \geq 0$
 $\sqrt{y} = 9 - \sqrt{x} \Rightarrow 9 - \sqrt{x} \geq 0 \Rightarrow \sqrt{x} \leq 9 \Rightarrow x \leq 81$

$f(x) = \log_{10} |x-1|$

$|x-1| > 0$ $|x| > 1 \Rightarrow x > 1$

$\log_{10} |x-1| > 0$ $|x-1| > 1 \Rightarrow |x| > 2$

$D_f = \{x \mid x > 2\}$

$f(x) = \frac{1}{4 + \sqrt{|x|} - |x|}$

$4 + \sqrt{|x|} - |x| \neq 0$
 $\sqrt{|x|} - |x| \neq -4$

$|x| = t \Rightarrow 4 + t - t^2 \neq 0$ $(t-1)(t+4) \neq 0 \Rightarrow t \neq 1, -4$
 $t^2 - t - 4 \neq 0$ $\sqrt{|x|} \neq 1 \Rightarrow x \neq \pm 1$

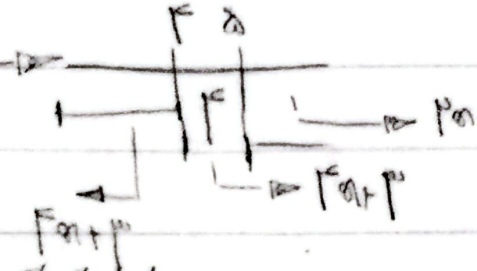
$D_f = (-9, 1)$

$a \neq z$
 $a = -p$

$\frac{(a+p)n + ab + r}{n+p}$

صورت بنیادیه باشد داشته باشد

$g = \sqrt{\frac{p(n+p) + a}{n+b}}$ $D_f = (1, +\infty)$ $\Rightarrow \frac{p(n+p)}{n+b} > p \Rightarrow a = -p$ -V 1, 10
 $\Rightarrow a+b \neq 0 \Rightarrow n \neq -b \Rightarrow b = -p$

$[n]_p^k \Rightarrow$  $\Rightarrow y = \sqrt{f(n) - n + 1}$ - 1 (2)
 $\Rightarrow \frac{n}{p} > a \Rightarrow y = \sqrt{p(n-1) - n + 1} \Rightarrow y = \sqrt{n} \Rightarrow \frac{n}{p} > 0$
 $\Rightarrow \frac{n}{p} < a \Rightarrow y = \sqrt{p(n+p) - n + 1} \Rightarrow y = \sqrt{n+1} \Rightarrow \frac{n}{p} < \frac{p}{p}$
 $\Rightarrow \frac{n}{p} > a \vee \frac{n}{p} < a \Rightarrow D_f = [-\frac{p}{p}, +\infty)$

$g = \frac{p(n+p) + p(n+p) + 1}{(p(n+p) + 1)^p} = \frac{p(1 + p(n+p) + 1)}{(p(n+p) + 1)^p} = \frac{p(p(n+p) + 1)}{(p(n+p) + 1)^p} = \frac{p}{p(n+p) + 1}$ - 1 (2)
 $D_f = \mathbb{R} - \{-\frac{p}{p}\}$

$y = \sqrt{1 - \log(p(n-a))}$

$p(n-a) > 0 \Rightarrow p(n) > a \Rightarrow \frac{n}{p} > \frac{a}{p}$ - 1 (2)
 $1 - \log(p(n-a)) > 0 \Rightarrow \log(p(n-a)) < 1 \Rightarrow p(n-a) < e$
 $p(n) < 1 + \frac{a}{p} \Rightarrow n < \frac{1 + \frac{a}{p}}{p} \Rightarrow D_f = (\frac{a}{p}, \frac{1 + \frac{a}{p}}{p}]$
 $C-b = \frac{1 + \frac{a}{p}}{p} - \frac{a}{p} = \frac{1}{p}$