

$$y = -\frac{1}{13}x^2 + \frac{2}{3}x + 1$$

$$-\frac{1}{13}(x-4)^2 + 13 = 0$$

$$(x-4)^2 = 9 \rightarrow x = 1, 7$$

$$x-4 = 3 \quad x = 7$$

$$x-4 = -3 \quad x = 1$$

۲. آفرین!

آید انامداری
دوازدهم و شانزدهم
توفیق ✓
[1]

(۲)

$$f \rightarrow \frac{1}{4}$$

$$1 - 2f(3x+2) \rightarrow \begin{matrix} \text{طول جدید} \\ -\frac{1}{13} \\ \text{عرض جدید} \\ -7 \end{matrix}$$

$$\propto \frac{1}{13} \text{ طول ها } -2$$

$$+10 \text{ عرض ها } x-2$$

$$\begin{vmatrix} -\frac{1}{13} \\ -7 \end{vmatrix}$$

$$-\frac{1}{13} \times -7 = \frac{7}{13}$$

[2]

(۲)

$$3 - \sqrt{2x} \rightarrow 3 - \sqrt{2(x+1)}$$

$$-3 + \sqrt{2x+2} + 5 = \frac{7}{2}$$

$$\sqrt{2x+2} = \frac{1}{2}$$

$$\frac{7}{2} - \frac{5}{2} = \frac{1}{2}$$

[3]

(۲)

$$2x+2 = \frac{9}{4}$$

$$2x = \frac{1}{4} \rightarrow x = \frac{1}{8}$$

$$x = \frac{1}{8}$$

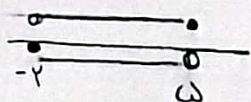
$$f(x-1) + g(x+1)$$

$$+1 \text{ طول ها}$$

$$-1 \text{ طول ها}$$

$$[-2, b-1]$$

$$(a+1, 5]$$



$$a+1 = -2$$

$$a = -3$$

$$b-1 = 5 \rightarrow b = 6$$

$$a-b$$

$$-3-6 = -9$$

[4]

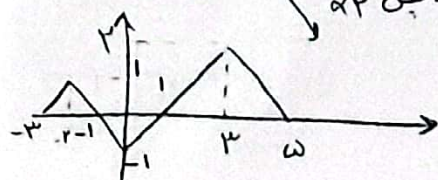
(۲)

$$f\left(\frac{x}{2} + 1\right)$$

$$\rightarrow \propto 2 \text{ طول ها } -1$$

$$\propto \frac{1}{2} \text{ طول ها}$$

$$+1 \text{ عرض}$$



$$f(x)$$

$$\rightarrow \left[-\frac{1}{2}, \frac{3}{2}\right]$$

$$دامنه [-3, 5]$$

$$\rightarrow \left[-\frac{1}{2}, \frac{3}{2}\right]$$

$$بردار [-1, 2]$$

$$\rightarrow [-1, 2]$$

$$\rightarrow [1, \sqrt{5}]$$

$$\sqrt{|2f(x)-1|}$$

[5]

(۲)

$\frac{x}{a} [ax]$ طبقه دوم a را بیرون می‌کشند

4

1% $f(-\frac{1}{a}) = \frac{1}{f}$ $-\frac{1}{a^r} [-1] = \frac{1}{f}$ $a^r = f$
 $a = r^x$
 $a = -r$ ✓
 $1+r$ (3) ✓

2

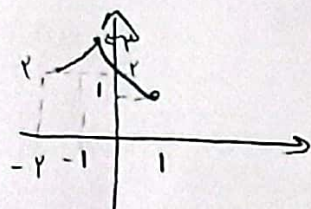
$\log_r^n \rightarrow \log_r^{n+r} \rightarrow -\log_r^{n+r} \rightarrow -\log_r^{n+r} + 3 \rightarrow -\log_r^{n+r} + 3$

5

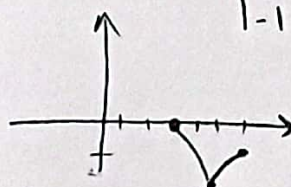
$9(-14) + 9(-42)$

$-1 + (-3) = -4$ ✓

$-f + 3$
 r^4
 $-4 + 3$



$\begin{vmatrix} -2 & -1 \\ 2 & 3 \end{vmatrix} \begin{vmatrix} 1 \\ 1 \end{vmatrix}$



$\begin{vmatrix} 4 & 5 \\ -1 & -2 \end{vmatrix} \begin{vmatrix} 3 \\ 0 \end{vmatrix}$ صد ها +
 - صد ها - $f(n-1) = 1$

2

$r - f(3-x)$ صد ها - 3 بی $\rightarrow$ صد ها - 3 بی
 $\div 3 - 1$
 عرض ها - 1 بی $\rightarrow$ عرض ها - 1 بی

$f(x)$
 $\begin{vmatrix} 5 & 4 \\ 0 & -1 \end{vmatrix} \begin{vmatrix} 1 \\ 1 \end{vmatrix}$

9

$f(x) = \left| \frac{x+1}{2x+1} \right| \rightarrow \left| \frac{(x-2)+1}{2(x-2)+1} \right|$
 $\frac{x-1}{2x-3} + 1 + x < 0$

2

$\frac{x-1}{2x-3} > 0$
 $\frac{1}{+} \mid \frac{3}{-} +$

$x > \frac{3}{2} \mid x < 1$

$\frac{x-1}{2x-3} + 1 + x < 0$
 $\frac{x-1+2x-3+2x^2-3x}{2x-3} < 0$

$\frac{2x^2-4}{2x-3} < 0$

$1 < x < \frac{3}{2}$

$\frac{-x+1}{2x-3} + \frac{2x^2-3x}{2x-3} < 0$

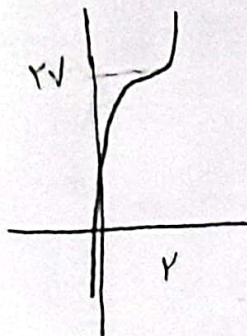
$\frac{-\sqrt{2}}{0} + \frac{\sqrt{2}}{0} - \frac{3}{0} +$

$\frac{2x^2-2x-2}{2x-3} < 0$ $f = f(2)(-2)$ $\frac{2+\sqrt{2}}{2-\sqrt{2}}$ $\frac{2-\sqrt{2}}{2}$

$\frac{1}{-1.4} \mid \frac{1}{1.4} \mid \frac{1}{1.0}$

$\frac{2-\sqrt{2}}{2} \mid \frac{3}{2} \mid \frac{2+\sqrt{2}}{2}$ انتهای ماباره ندارد

$x < \sqrt{2}$



1%

$$a(x-r)^p + rV$$

$$-1a + rV =$$

$$rV = 1a \quad a = \frac{rV}{1}$$

$$\frac{rV}{1} (x-r)^p + rV$$

$$\frac{rV}{1} (x-r)^p - rV$$

$$g(x) = \sqrt{r \wedge f(x) - f(x)^r}$$

$$f(x)(r \wedge - f(x)) \geq 0 \quad f(x)^-$$

$$f(x)(r \wedge - f(x)) \geq 0$$

$$\frac{0}{-0+0-}$$

$$\frac{rV}{1} >$$

-r

$$0 \leq \frac{rV}{1} (x-r)^p + rV \leq r \wedge$$

$$-rV \leq \frac{rV}{1} (x-r)^p \leq 1$$

$$-1 \leq (x-r)^p \leq \frac{1}{rV}$$

$$-r \leq x-r \leq \frac{r}{r}$$

$$0 \leq x \leq \frac{r}{r} + \frac{4}{r}$$

$$[0, \frac{1}{r}]$$

✓
r, 1, 0
مصحح

10
2