Subject :

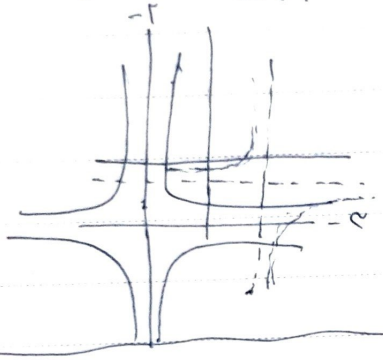
Year . Month . Date . ( )

(۷) $f(x)=|۲x-۴|+۱$

$\longrightarrow |۲(x+k)-۴|+۱ \longrightarrow |۲x+۲k-۴|+۱ \longrightarrow |۲x+۲k-۴|-۲$

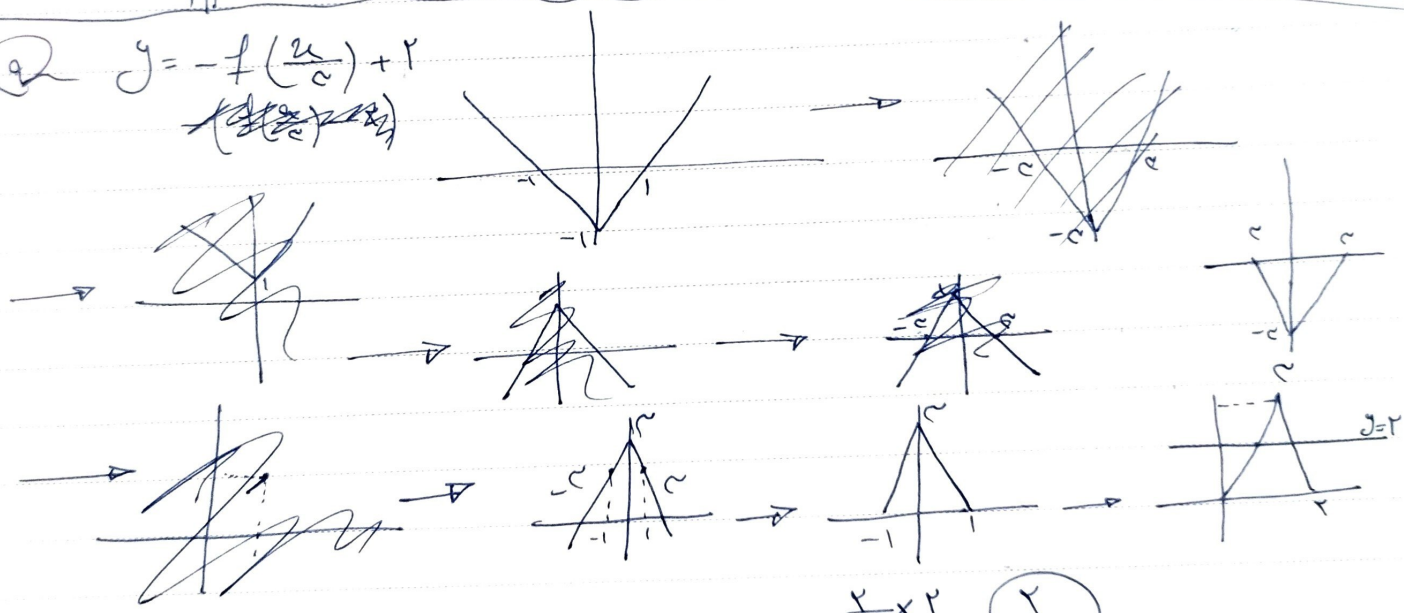
$\underbrace{|-۴|}_{۴}+۱=|۲k-۴|-۲ \longrightarrow ۲k-۴=۶ \longrightarrow k=۵$

(۸) $f(x)=\frac{۲x-۱}{x+۱} \longrightarrow \frac{-۲x+۱}{x+۱} \longrightarrow \frac{-\frac{۱}{۴}x+۱}{\frac{۱}{۴}x+۱}$



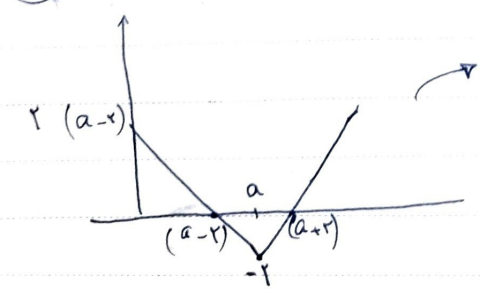
گسیختگی: ۲

(۹) $y=-f\left(\frac{x}{۴}\right)+۲$



$\frac{۲}{۴}\times ۲=\frac{۲}{۴}$

(۱۰) $f(x)=|x-a|-۲$



$\frac{۴\times ۲}{۴}+\frac{۲\times(a-۲)}{۴}=\frac{۹}{۲} \longrightarrow a=\frac{۵}{۲}$

$\left|\frac{۲}{۵}-\frac{a}{۲}\right|-۲$

$\frac{۲۱}{۱۰}-۲=\frac{۱}{۱۰}$

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(1) $f(x)$ $f(2x-1)$

$[-3,2]$

$-3 \le 2x-1 \le 2 \longrightarrow -2 \le 2x \le 3 \longrightarrow -1 \le x \le \frac{3}{2}$

$f(2x-1)$ $[-3,3]$

$-3 \le x \le 3$

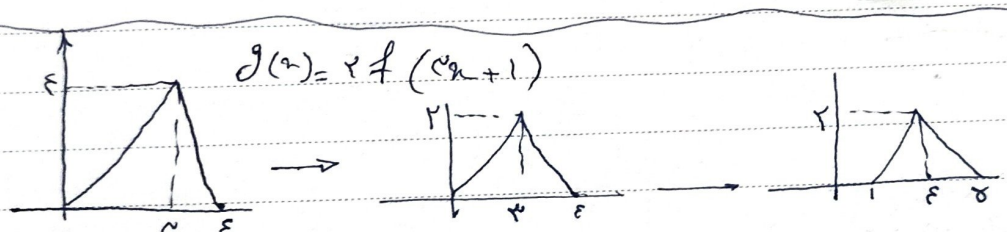
$-1 \le 2x \le 6$

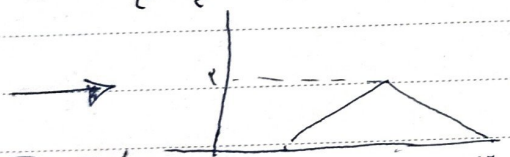
$-1 \le 2x-1 \le 5$

(2) $f(x) = x + \sqrt{x-2}$ $\longrightarrow y = x-2+\sqrt{x-3}$ $\xrightarrow{y=x}$ $x = x-2+\sqrt{x-3}$

$\sqrt{x-3} - 2 = 0 \longrightarrow x-3 = 4 \longrightarrow x = 7$ (غ) $\quad x = 0$ (ق)

(3) $g(x) = 2f(2x+1)$



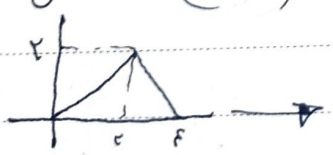


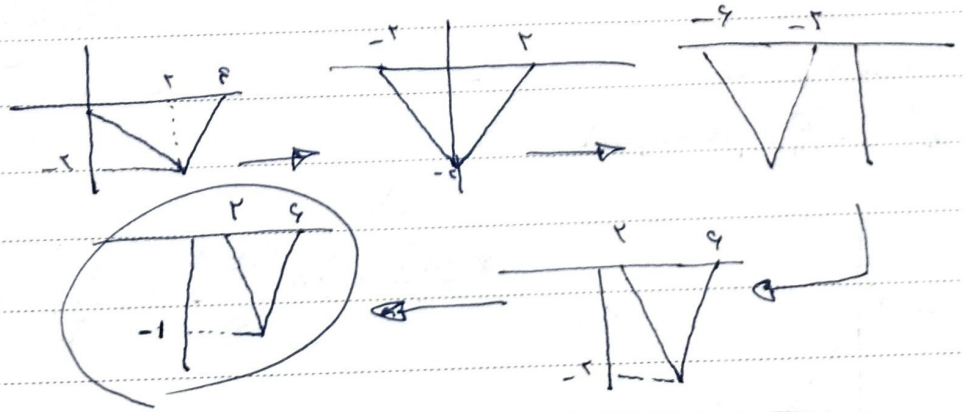
$S = \frac{1}{2} \times 2 \times (5-1) = 4$ مساحت

(4) $A(2,-5)$ $y = a + 2f\left(\frac{x-a}{2}\right)$

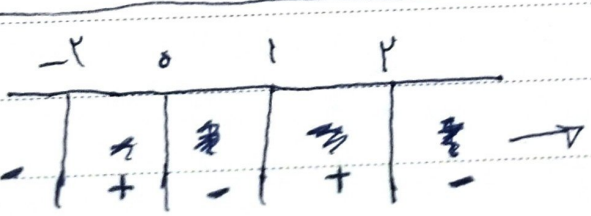
$y = f(x)$

(5) $y = -f(x-2)$





$y = \sqrt{-(x+2)f(2x-1)}$



$x \in [-2,0] \cup [1,2]$