

نام و نام خانوادگی شماره کلاس دراز
پاسخنامه تشریحی تکلیف شماره ۶

۱) $-4 < m \leq 2 \Rightarrow -12 \leq 3m \leq 6 \Rightarrow -14 < 3m-2 \leq 4 \quad [-14, 4]$

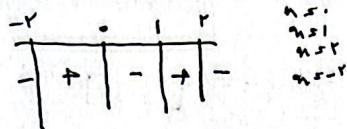
ب) $-4 \leq 3m-2 \leq 4 \Rightarrow -2 \leq 3m \leq 6 \Rightarrow -\frac{2}{3} \leq m \leq 2 \quad [-\frac{2}{3}, 2]$

مقادیر $(m-2) + \sqrt{(m-2)-2} \Rightarrow m-2 + \sqrt{m-4} = y \Rightarrow m + \sqrt{m-4} = y+2 \Rightarrow m^2 + m - 4 + \sqrt{m-4} = y^2 + 4y + 4$
 $m^2 + m - 4 + \sqrt{m-4} = y^2 + 4y + 4 \Rightarrow m^2 - y^2 + m - 4y - 8 = 0 \Rightarrow (m-y)(m+y) + m - 4y - 8 = 0$

طرحه تغییر $\rightarrow$ $f(x) = x^2 - 12x + 18$
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$a + 2f\left(\frac{a-a}{2}\right) = 2a - 1 \Rightarrow 2f\left(\frac{a-a}{2}\right) = \frac{2a - (1+a)}{2} \Rightarrow f\left(\frac{a-a}{2}\right) = \frac{2a - (1+a)}{2}$
 $f(m) = 2m - 1$

$y = f(a-x) \rightarrow$
 $f(a-x) \rightarrow$
 $f(-ax) \rightarrow$
 $\frac{1}{r} f(-u+r) \rightarrow$



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

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$$|2(n-k)-3|+1-2$$

$$\Rightarrow n.s. \Rightarrow |-2k-3|-2 \leq |-2|+1$$

$$|2k+3| \leq 6$$

$$2k+3 \leq 6 \Rightarrow k \leq 1.5$$

$$2k+3 \geq -6 \Rightarrow k \geq -4.5$$

$$k \in [-4.5, 1.5]$$

چون به سمت راست حساب می شود و غیر قابل قبول است

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نیمه مجزئ شده

$$\frac{2n-1}{n+1} \leq \frac{2n}{n+1} - 1 + k \leq \frac{2n-1}{n+1}$$

$$\frac{-2n+1}{n+1} + k \leq \frac{2n-1}{n+1}$$

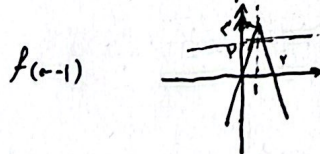
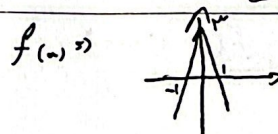
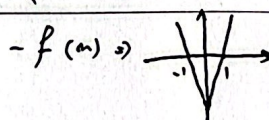
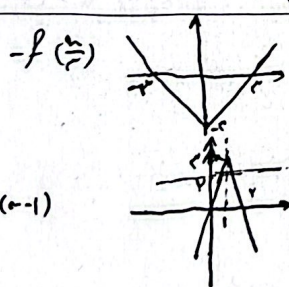
$$\frac{-2n+1}{n+1} + k \leq \frac{2n-1}{n+1}$$

$$\frac{(-2+k)n+1}{n+1} \leq \frac{2n-1}{n+1}$$

$$(2n-1)(n+1) \leq (-2+k)n+1 \Rightarrow 2n^2-1 \leq -2n+kn+1 \Rightarrow 2n^2+2n-2 \leq kn+1$$

$$15k^2-12k^2+20k+10 \leq 0 \Rightarrow 3k^2+20k+10 \leq 0$$

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$$\frac{2 \times (2 + \frac{1}{2})}{2} = \frac{1}{2}$$

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$$\min s(a, -2) \Rightarrow \frac{(a-2)(a-2)}{2} + \frac{f(a)}{2} = \frac{a^2-4a+4}{2} + \frac{f(a)}{2}$$

$$a=2 \Rightarrow f(\frac{1}{2}) = |2 - \frac{1}{2}| - 2 = \frac{1}{2} - 2 = -\frac{3}{2}$$

$$\frac{(a-2)^2}{2} \leq \frac{1}{2}$$

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