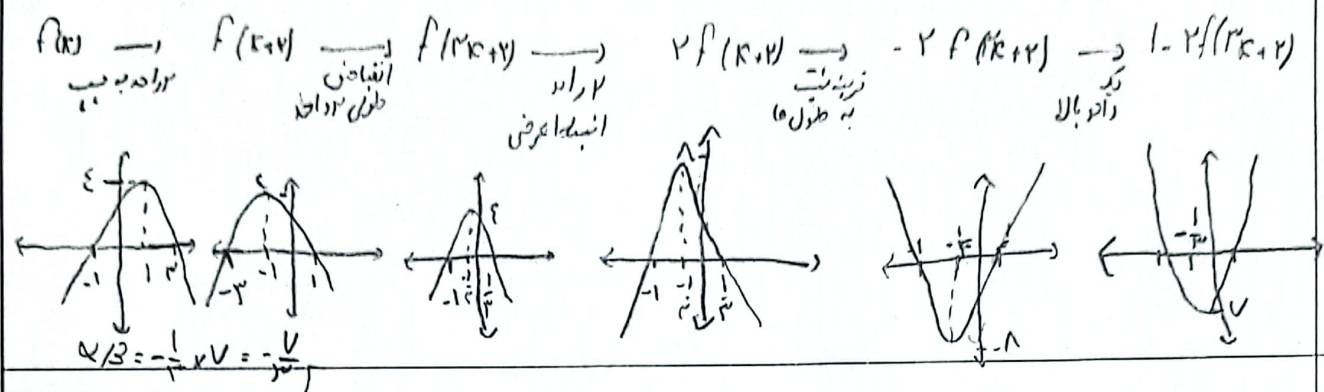


نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۱۰۰ ... کلاس: ریاضی ۱

$$b(x-4)^2 + 3 = g(x) \quad \frac{b_1 + \frac{1}{3} \cdot \frac{1}{3}(x-4)^2 + 3 = (x^2 - 8x + 16) + 3}{+8 \pm \sqrt{48 - 28} = \frac{8 \pm 4}{2}} \quad \frac{1}{2}(x^2 - 8x + 19)$$

$$\frac{1}{10}(-5x^2 + 4x + 15)$$

$$\text{or } \left| \begin{array}{c} 1 \\ 1 \end{array} \right| \quad a(x-4)^2 + 1, 12 = \frac{1}{3}(x-6, 4)^2 + 1, 12 \quad \frac{1}{3}(x-4)^2 + 3$$



$$3 - \sqrt{2(x+1)} \xrightarrow{\text{تغییر جهت } 3} \sqrt{2(x+1)} - 3 \xrightarrow{\text{تغییر جهت } 3} \sqrt{2(x+1)} + 3 \Rightarrow \sqrt{2(x+1)} = \frac{3}{2} \Rightarrow 2(x+1) = \frac{9}{4}$$

$$\Rightarrow x+1 = \frac{9}{8} \Rightarrow x = \frac{1}{8}$$

$$\begin{aligned} D_{f(x+1)} &= (a+1, d] \Rightarrow a+1 = -2 \Rightarrow a = -3 \\ D_{g(x+1)} &= [-2, b-1] \Rightarrow b-1 = 0 \Rightarrow b = 1 \end{aligned} \Rightarrow a-b = -3-1 = -4$$

تغییرات در کمانه فواصل در

این دهن گشت

$$x=0 \Rightarrow f\left(\frac{x}{2}+1\right) = f\left(\frac{0}{2}+1\right) = f(1)$$

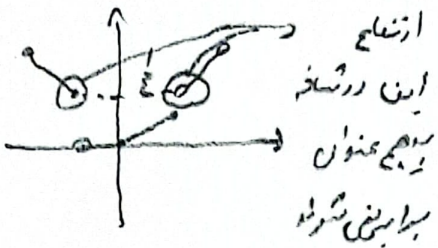
$$x=-2 \Rightarrow f\left(\frac{x}{2}+1\right) = f\left(\frac{-2}{2}+1\right) = f(0)$$

$$g(x) = \sqrt{2f(x)-1} \Rightarrow D_g = D_f \cdot \left[-\frac{1}{2}, \frac{1}{2}\right] \Rightarrow \left[-\frac{1}{2}, \frac{1}{2}\right] \Rightarrow \left[-\frac{1}{2}, \frac{1}{2}\right]$$

$$\Rightarrow R_g = [0, 5]$$

نیز از کار
هوا به مشن
است

سوال ایراد دارد



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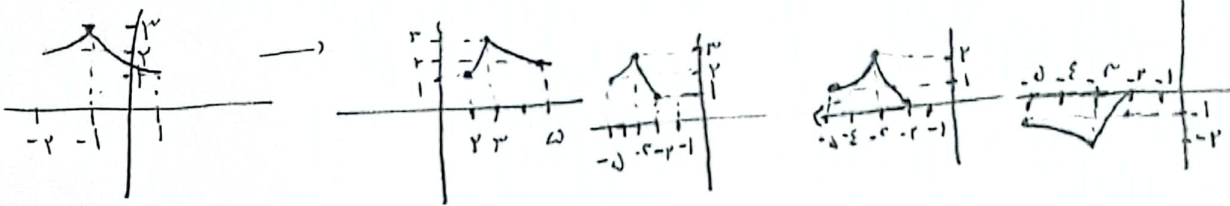
$$\log_2^x \rightarrow \log_2^{x+2} \rightarrow -\log_2^{x+2} \rightarrow -\log_2^{x+2} + 3 \rightarrow -\log_2^{x+2} + 3 = g(x)$$

$$\Rightarrow g(-12) = -\log_2^{14} + 3 = -1 \quad g(-42) = -\log_2^{44} + 3 = -3$$

$$g(12) + g(42) = -1 + (-3) = -4$$

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$$y = f(3-x) \xrightarrow{\text{تغییر متغیر}} y = f(-x-1) \xrightarrow{\text{تغییر متغیر}} y = f(x-1) \xrightarrow{\text{تغییر متغیر}} y = f(x-1) \xrightarrow{\text{تغییر متغیر}} f(x-1) - 1$$



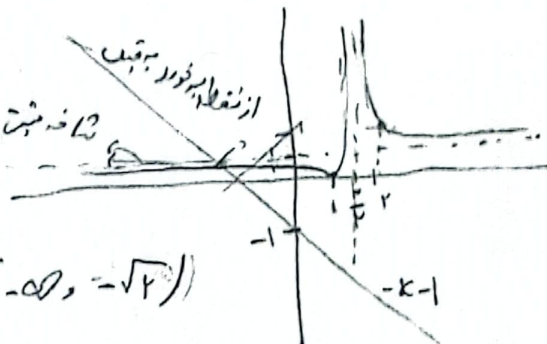
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$$\left| \frac{x-1}{x-3} \right| + 1 = g(x) \quad \left| \frac{x+1}{x-3} \right| + (x+1)^2$$

$$\left| \frac{x-1}{x-3} \right| < -x-1$$

$$\frac{x-1}{x-3} = -x-1 \Rightarrow x-1 = -x^2-4x-3 \Rightarrow x^2+5x+2=0$$

$$x^2+5x+2=0 \Rightarrow x = \frac{-5 \pm \sqrt{25-8}}{2} = \frac{-5 \pm \sqrt{17}}{2}$$



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$$y = x^3 \quad g(x) = \sqrt{2 \ln f(x) - f(x)} \rightarrow g(x) = \sqrt{-f(x) / (f(x) - 2 \ln)}$$

$$f(x) = (x-2)^3 + 22$$

$$x = -1$$

$$f(x) = 22 \Rightarrow x = 3$$

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$$\text{تعیین علامت} \frac{-1}{-1+1} \Rightarrow D_f = [-1, 3] \rightarrow -1, 0, 1, 2, 3 = 0$$