

نام و نام خانوادگی: آریال پاسخنامه تشریحی تکلیف شماره کلاس درجه B

$$\left. \begin{aligned} x \geq 0 &\rightarrow 2x-1 = f(x) \rightarrow \sqrt{2x} \rightarrow x \geq 0 \rightarrow [0, +\infty) \\ x < 0 &\rightarrow (x+3) = f(x) \rightarrow \sqrt{2x+3} \rightarrow x \geq -\frac{3}{2} \rightarrow \left[-\frac{3}{2}, 0\right) \end{aligned} \right\}$$

$$D_f = \left[-\frac{3}{2}, +\infty\right) \checkmark$$

(2)

1

$$\frac{3(1x^2 + 12x + 4x + 1)}{((2x+1)^2)^2} = \frac{3(2x+1)^3}{(2x+1)^4} = \frac{3}{2x+1} \checkmark$$

$$D_g = \mathbb{R} - \left\{-\frac{1}{2}\right\} \checkmark$$

(2)

2

$$\frac{x(x^2-1) + 2(x^2-1)}{(x^2-1)} = x+2 \rightarrow x+2 = x+c \rightarrow c=2 \checkmark$$

$$x=1 \rightarrow \frac{a+2}{b+1} = c+1 = 3 \rightarrow 2b+3 = a+2 \rightarrow a-2b=1$$

$$x=-1 \rightarrow \frac{2-a}{b-1} = c-1 = 1 \rightarrow b-1 = 2-a \rightarrow a+b=3$$

$$b+c = 2 \checkmark$$

$$b=2 \checkmark$$

$$b=2 \checkmark$$

$$b=2 \checkmark$$

$$b=2 \checkmark$$

$$b=2 \checkmark$$

$$b=2 \checkmark$$

(1, 198)

3

$$f(x) = \frac{x+1}{x-c} \cdot \frac{x(x-1)}{x(x-1)} \rightarrow \frac{x^2-1}{(x-c)(x-1)}$$

$$D_f = D_g = \mathbb{R} - \{c\} \rightarrow (x-c)(x-1) \rightarrow c=1 \checkmark \rightarrow x^2+ax+b = x^2-2x+1$$

$$a+b+c = -2+1+1 = 0 \checkmark$$

(2)

4

$$g(x) = (x-2)^2(x) + \frac{(-x-2)^2}{(x+1)^2}(-x) = x \left[(x-2)^2 - (x+2)^2 \right]$$

$$x(x^2-4x+4 - x^2-4x-4) = -8x \checkmark$$

(2)

5

$$f(-1) = f(1-2a) \Rightarrow x=1 \Rightarrow \sqrt[3]{x} = 1 \checkmark$$

$$f(3) = f(1-2a) \Rightarrow x=-1 \Rightarrow \sqrt[3]{x+2} = -1+2=1 \checkmark$$

$$\underline{\underline{f+1=d}} \checkmark$$

6

$$x+\sqrt{x}=4 \Rightarrow x=5 \rightarrow x^2+2x = 25+12=37 \checkmark$$

7

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

$$f(x-1) + f(-(x-1)) = x(x-1)(x-2) - x(x-1)(x-2) = 0 \checkmark$$

8

$$\left. \begin{aligned} x-2a \geq 0 &\rightarrow x \geq 2a \rightarrow x \geq \frac{2a}{f} \xrightarrow{x=1} a = \frac{f}{2} \\ b-x \geq 0 &\rightarrow x \leq b \xrightarrow{x=1} b = f \end{aligned} \right\}$$

نقطه در ا
تقریب به بیشترین
اشتراک دو دامنه برابر است.

$$\begin{aligned} 2\sqrt{f-2a} + 2K - 2 - \sqrt{b-f} - 2K &= 2\sqrt{0} - \sqrt{0} - 2 - K = -K - 2 = K \\ 2a - \frac{b}{f} - K &= f - 2 + 1 = 3 \\ 2K &= -2 \rightarrow K = -1 \end{aligned}$$

9

$$\left. \begin{aligned} D_g = [-1, +\infty) \quad \frac{D_f \cap D_g = [-1, 1]}{D_f \cap D_g = [-1, 1]} \quad D_f = (-\infty, +1] \end{aligned} \right\} m = +1$$

$$f-g(x) = \sqrt{f+x} - \sqrt{1} = 1 - 2\sqrt{f} + n = 4\sqrt{f} \Rightarrow n = 1\sqrt{f} = 1 \checkmark$$

$$m+n = 1\sqrt{f} - 2 + 1 = 1\sqrt{f} + 1 \checkmark$$

10