

نام و نام خانوادگی شماره کلاس پاسخنامه تشریحی تکلیف شماره ۲۲

$$a + 1$$

$$b = a + 1 \rightarrow f \rightarrow a \leq 1$$

$$f_+(n) = f_-(n) \Rightarrow a + 1 = b \quad b - a = 1$$

$$a + b = \frac{1}{2} + \frac{1}{2} = 1$$

$$f'_+(n) = \frac{2n}{2\sqrt{n^2}} = f'_-(n) = \frac{2bn}{2\sqrt{n^2}} \Rightarrow \frac{1}{\sqrt{n}} = \frac{2b}{2} \Rightarrow b = \frac{1}{2}$$

$$\frac{f(n) - 2g(n)}{h(n)} = \frac{\frac{1}{\sqrt{n}} + 2(n-2)\sqrt{n}}{\sqrt{n^2}} = -2\sqrt{n} + \frac{1}{\sqrt{n}}$$

$$h(n) = 2\sqrt{n} \Rightarrow h'(n) = \frac{1}{\sqrt{n}} = \frac{1}{\sqrt{n}}$$

$$ba + c = \frac{1}{a} \Rightarrow ab + ac = 1 \Rightarrow ac = 1$$

$$f'_+(n) = f'_-(n) \Rightarrow b = -\frac{1}{n^2} \quad ab = -1$$

اگر m برابر با صفر باشد که مستقیم است و در وصال منتهی است
(اگر m بزرگتر از ۱ باشد، نقطه a مستقیم است منتهی است
نقطه a مستقیم است $m \leq 1$ در نقطه a مستقیم است

$$b \quad n > a$$

$$b + (n-a) \quad n \leq a$$

$$\log(-\sqrt[n]{n}) = \sqrt[n]{n} = -1$$

$$f(n) = \frac{1}{\sqrt{2n}}$$

$$g(n) = \frac{1}{\sqrt{2n}}$$

$$-a + \sqrt{a+D} < 1 \quad \sqrt{a+D} < 1 \quad \sqrt{a} = -1$$

$$f(x) = -a = -\frac{1}{f}$$

$$f(1) = \sqrt{a+D} \Rightarrow \sqrt{a+D} = \frac{1}{f}$$

$$\frac{f(x)}{f'(x)} = \frac{\frac{1}{f}}{-\frac{1}{f^2}} = -f$$

$$f \circ g\left(\frac{c}{\sqrt{x}}\right) = \left(\frac{1}{\sqrt{x-1}}\right)^2 + 1 \quad (f \circ g)\left(\frac{c}{\sqrt{x}}\right) = (x^2-1)^{-\frac{1}{2}} + 1$$

$$f \circ g\left(\frac{c}{\sqrt{x}}\right) = -\frac{1}{2}(x^2-1)^{-\frac{3}{2}} \times \frac{1}{\sqrt{x}} = -\frac{1}{2}(x^2-1)^{-\frac{3}{2}} \times \frac{1}{\sqrt{x}} = -\frac{1}{2} \frac{1}{\sqrt{x}(x^2-1)^{\frac{3}{2}}}$$

$$\log \frac{-\frac{1}{2} \frac{1}{\sqrt{x}(x^2-1)^{\frac{3}{2}}}}{\frac{1}{\sqrt{x}(x^2-1)^{\frac{3}{2}}}} = \frac{-\frac{1}{2}}{1} = -\frac{1}{2}$$

$$g'(x) = f'(g(x)) + \sqrt{f'(g(x))}$$

$$f'(-1) = \frac{1}{\sqrt{-1}}$$

$$f'(-1) = f'(1)$$

$$g'(-1) = f'(-1) + \sqrt{f'(1)}$$

$$g'(-1) = 1$$

$$\frac{-2f(u)f'(u) + \sqrt{f'(u)}}{u}$$

$$f(u) = \frac{1}{\sqrt{u+1}}$$

$$f'(u) = \frac{1}{\sqrt{u+1}} + \frac{1}{2\sqrt{u+1}}$$

$$\frac{-2 \times \frac{1}{\sqrt{u+1}} \times \frac{1}{2\sqrt{u+1}} + \sqrt{\frac{1}{\sqrt{u+1}}}}{u} = \frac{-\frac{1}{u} + \frac{1}{\sqrt{u+1}}}{u} = -\frac{1}{u} + \frac{1}{u\sqrt{u+1}}$$

$$y = \sqrt{x+1} \Rightarrow y = \frac{1}{\sqrt{x+1}} \quad m = 1 \quad m' = -\frac{1}{2}$$

$$y = x^2 - 1 \Rightarrow y' = 2x - 1$$

$$2x - 1 = -1$$

$$x = 1$$