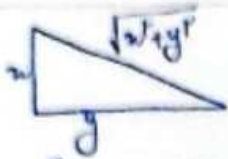


نام و نام خانوادگی: مجتبی جلالی پاسخنامه تشریحی تکلیف شماره 18. کلاس: پایه دهم ریاضی

$$\frac{dL}{dw} = \frac{\omega + \pi}{r} = \frac{1 + \sqrt{5}}{r} \quad 1 + 2\pi = r + r\sqrt{5}$$

$$2\pi = r\sqrt{5} - 1 \quad \pi = \frac{r\sqrt{5} - 1}{2} \quad L = r + r\sqrt{5}$$

$$\frac{\text{مشتقات}}{\text{مشتقات}} = \frac{r_x(r + r\sqrt{5})}{r_x \omega} = \frac{r + r\sqrt{5}}{\omega}$$



$$\frac{\sqrt{x^2 + y^2}}{y} = \frac{1 + \sqrt{5}}{r} \quad \frac{r}{y} \cdot \frac{x^2 + y^2}{y^2} = \frac{1 + \sqrt{5}}{r} \Rightarrow$$

$$\frac{x^2}{y^2} + 1 = \frac{r + r\sqrt{5}}{r} \quad \frac{x^2}{y^2} = \frac{r + r\sqrt{5}}{r} - 1 = \frac{r\sqrt{5}}{r} = \sqrt{5}$$

$$\frac{y^2}{x^2} = \frac{1}{\sqrt{5}} = \frac{\sqrt{5} - 1}{2}$$

$$ra + \sqrt{ra^2 + ea} = r$$

$$\sqrt{ra^2 + ea} = r - ra$$

$$ra + ra = r + 9a^2 - 12a$$

$$9a^2 - 14a + r = 0 \quad a = \frac{14 \pm 1r}{18}$$

$$a = \frac{r}{9} \quad \sqrt{00}$$

$$\frac{a+1}{a} = \frac{9}{r} = \frac{9}{r}$$

$$\frac{\sqrt{x+1}}{\sqrt{x-1} + r} - \frac{\sqrt{x+1}}{r - \sqrt{x-1}} = \frac{x-1}{\sqrt{x-1}}$$

$$\frac{\sqrt{x+1} (r - \sqrt{x-1}) - \sqrt{x+1} (r + \sqrt{x-1})}{9 - (x-1)} = \frac{x-1}{\sqrt{x-1}}$$

$$\text{if } \sqrt{x+1} = 0 \quad x \geq -1$$

$$1 \dots + x^2 - r \cdot x = rx + r \rightarrow x^2 - 2rx + 99 = 0 \quad x = \frac{2r \pm \sqrt{4r^2 - 396}}{2}$$

$$\frac{1}{\sqrt{r-x} + r} + \frac{1}{\sqrt{r-x} - r} = \frac{r-x}{\sqrt{r-x}} \quad \sqrt{r-x} = t$$

$$\frac{1}{t+r} + \frac{1}{t-r} = \frac{t}{\omega t} \Rightarrow \frac{rt}{t^2 - r^2} = \frac{t}{\omega t} \quad 1 \cdot t^2 = t^2(t^2 - r^2)$$

$$\sqrt{r-x} = r \quad x = -r$$

$$\frac{1}{x^2} + \frac{1}{(1-x)^2} = \frac{14}{9} \quad x(x-1) = A$$

$$\frac{x(1-x)}{x^2(1-x)^2} = \frac{14}{9} \quad \Rightarrow \frac{(A+1)}{A^2} = \frac{14}{9} \quad 14A^2 = 9 - 14A$$

$$A = \frac{-14 \pm \sqrt{14^2 + 4 \cdot 14 \cdot 9}}{2 \cdot 14} \quad \begin{cases} x^2 - x = \frac{1}{10} \\ 10x^2 - 10x + 1 = 0 \quad S=1 \\ 10x^2 - 10x - 1 = 0 \quad S=-1 \end{cases} \quad 1+1=2$$

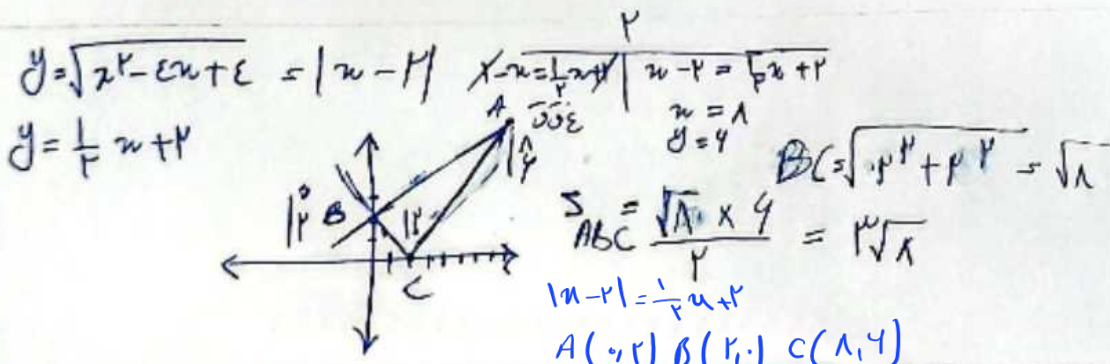
$$\sqrt{x^2 - 2x + 1} + \sqrt{x^2 - 4x + 1} = x + 1 \quad (x \geq -1)$$

$$D: -x^2 + 2x + 1 \geq 0 \quad \begin{cases} -(x^2 - 4x + 1) \geq 0 \\ (x-2)(x-1) \geq 0 \end{cases}$$

$$\begin{matrix} 1 & 2 & 1 \\ - & + & - \\ \hline 1 & - & 1 \end{matrix} \quad \cap \quad \begin{matrix} 1 & 2 & 1 \\ - & + & - \\ \hline 1 & - & 1 \end{matrix} \quad x = 2 \quad y = 1$$

$$y = |x+1| + |x-1| \quad y = \frac{-x+1}{\mu} + \frac{x+1}{\mu}$$

$$AB = \sqrt{(1-(-1))^2 + (0-1)^2} = \sqrt{5} = \sqrt{5}$$



$$\frac{1}{x} + \frac{1}{x-9} = \frac{1}{10}$$

$$\frac{x-9}{x^2-9x} = \frac{1}{10}$$

$$x^2 - 9x = 10x - 90 \quad x^2 - 19x + 90 = 0 \quad (x-9)(x-10) = 0 \quad x = 9 \quad x = 10$$

$$x = 9 \quad y = 1 \quad x = 10 \quad y = 1$$