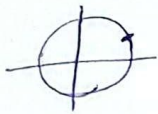


$$-r^+ \rightarrow r \left[\frac{r}{r} \right] + a \left[\frac{0^+}{r} \right] = r \times 1 = r$$

$$-r^- \rightarrow r \left[\frac{r}{r} \right] + a \left[\frac{0^-}{r} \right] = r - a \Rightarrow r - a = r \rightarrow a = r \Rightarrow \left[\frac{r}{r} \right] = \frac{0}{0}$$

$$\lim_{x \rightarrow \pi/4^-} [r \sin x - 1] \quad \sin \pi/4 = 1/2 \rightarrow 1/2 \quad \left[\frac{r}{2} - 1 \right] = -1/2$$

$$x \rightarrow \pi/4^-$$



$$\lim_{x \rightarrow -1/2} [\lambda x^r - x] \rightarrow [-1 + 1/2] = -1/2$$

$$\lim_{x \rightarrow (-1/2)^-} \frac{10x - 8 + \left[\frac{r}{x^r} \right]}{14x - \left[-\frac{r}{x^r} \right]}$$

$$x < -1/2 \rightarrow \frac{1}{x} > -2 \rightarrow \frac{1}{x^r} < r \rightarrow \frac{r}{x^r} < 12$$

$$x < -1/2 \rightarrow \frac{1}{x} > -2 \rightarrow \frac{1}{x^r} < r \rightarrow \frac{-r}{x^r} > -12$$

$$\frac{10x - 8 + 11}{14x + 12} = \frac{10x + 3}{14x + 12} = \frac{1}{2} = -\infty$$

$$\lim_{x \rightarrow 1^+} \frac{\sin^r \pi x}{[x] + \cos \pi x} \rightarrow \frac{\sin^r \pi x}{1 + \cos \pi x} = \frac{1 - \cos^r \pi x}{1 + \cos \pi x} = \frac{(1 - \cos \pi x)(1 + \cos \pi x)}{1 + \cos \pi x} = 1 - \cos \pi x = 2$$

$$\lim_{x \rightarrow 1} \frac{\sqrt{2x+3} - \sqrt{3x+5}}{1 + \sqrt{x}} \times \frac{\sqrt{2x+3} + \sqrt{3x+5}}{\sqrt{2x+3} + \sqrt{3x+5}} \times \frac{r}{r} = \frac{r(2x+3 - 3x-5)}{r(1+x)} = \frac{r(-x-2)}{r(1+x)} = \frac{-r}{r} = -1$$

$$\lim_{x \rightarrow 1} \frac{rx - \sqrt{x} + 0}{rx - \sqrt{x} + 1} \times \frac{rx + \sqrt{x} + 1}{rx + \sqrt{x} + 1} = \frac{r(rx - \sqrt{x} + 0)}{r(rx^r - rx - 1)} = \frac{rx(\sqrt{x} - 1)(\sqrt{x} - \frac{0}{r})}{r(x-1)(x + \frac{1}{r})}$$

$$\frac{r(\sqrt{x} - 1)(\sqrt{x} - \frac{0}{r})}{(\sqrt{x} - 1)(\sqrt{x} + 1)(x + \frac{1}{r})} = \frac{r(\sqrt{x} - \frac{0}{r})}{(\sqrt{x} + 1)(x + \frac{1}{r})} = \frac{rx - \frac{r}{r}}{rx \frac{0}{r}} = \frac{-r}{0} = \frac{-\infty}{0}$$

$$\lim_{x \rightarrow 0} \frac{a + \sqrt{bx+c}}{x} \xrightarrow{\text{هو بیستال}} \frac{b}{\sqrt{bx+c}} = \frac{b}{\sqrt{c}} = \frac{1}{f} \quad fb = \sqrt{c} \quad \text{آرین نوری}$$

$$\sqrt{b} = \sqrt{c} \rightarrow fb^2 = c \quad a + \sqrt{bx+c} = 0 \rightarrow a + \sqrt{c} = 0 \quad a = -\sqrt{c} = -\sqrt{b} \quad -1$$

$$\frac{ab}{c} = \frac{-\sqrt{b} \times b}{b^2} = -\frac{1}{\sqrt{b}} \quad \checkmark$$

$$\lim_{x \rightarrow -\infty} \frac{f+K\left[\frac{x}{\sqrt{x}}\right]}{\sin x} \xrightarrow{-\infty^+} \frac{f+K[-\sqrt{x}]}{0^+} = \frac{f-\sqrt{x}K}{0^+} = +\infty \quad f-\sqrt{x}K > 0$$

$$\xrightarrow{-\infty^-} \frac{f+K[-\sqrt{x}]}{0^-} = \frac{f-\sqrt{x}K}{0^-} = +\infty \quad f-\sqrt{x}K < 0$$

$$\left. \begin{array}{l} \sqrt{x}K < f \rightarrow K < \frac{f}{\sqrt{x}} \\ \sqrt{x}K > f \rightarrow K > \frac{f}{\sqrt{x}} \end{array} \right\} \Rightarrow \frac{f}{\sqrt{x}} < K < \sqrt{x} \rightarrow -\frac{f}{\sqrt{x}} > -K > -\sqrt{x} \rightarrow [-K] = -\sqrt{x} \quad \checkmark$$

$$\lim_{x \rightarrow \infty} \frac{b\sqrt{f+\sqrt{x}} - fb}{ax-b} \times \frac{0}{0} \xrightarrow{\text{هو بیستال}} \frac{b^2(\sqrt{f+\sqrt{x}}) - fb^2}{fb(ax-b)} = \frac{b^2(\sqrt{f+\sqrt{x}} - f)}{fb(ax-b)} \quad -10$$

$$\frac{b(\sqrt{x} - f)}{f(ax-b)} \xrightarrow{\text{هو بیستال}} \frac{\frac{b}{2\sqrt{x}}}{\frac{b}{f}} = \frac{f}{2\sqrt{x}} = \frac{1}{2} \quad \checkmark$$

$$\Lambda a - b = 0 \rightarrow \Lambda a = b$$

$$fa = \frac{b}{f}$$