

$$\lim_{x \rightarrow 2^-} \frac{x^2 - 2}{x^2 + ax + b} = -\infty$$

صورت کبھی کبھی پوس صخرج بابہ سے صفر صی ۱ سے

$$(x-2)^2 = x^2 + 2x - 4 = x^2 + ax + b \quad a = -2 \quad b = 4$$

$$a+b=0$$

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$$\lim_{x \rightarrow \sqrt{2}^+} \frac{x^2}{x^2 + ax + b} = +\infty$$

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$$(x - \sqrt{2})^2 = x^2 - 2\sqrt{2}x + 2 = x^2 + ax + b$$

$$a = -2\sqrt{2} \quad b = 2 \quad \begin{bmatrix} -2\sqrt{2} \\ 2 \end{bmatrix} = \begin{bmatrix} 1 \\ -1 \end{bmatrix} = -1$$

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$$\lim_{x \rightarrow \frac{1}{\sqrt{2}}^+} \frac{[-2] + a}{\left(\frac{1}{\sqrt{2}}\right)^2 + a} = -\infty$$

$$a = -\frac{1}{\mu} \quad \frac{1}{\mu} = a \quad \frac{1}{\mu} = a$$

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$$\lim_{x \rightarrow (-\frac{1}{\sqrt{2}})^+} \frac{14x + 9}{x^2 + ax + 12} = 0$$

$$x > -\frac{1}{\sqrt{2}} \quad x^2 < \frac{1}{2} \quad \frac{1}{x^2} > 2 \Rightarrow \frac{14}{x^2} > 28 \quad \left[\frac{14}{x^2}\right] = +28$$

$$\lim_{x \rightarrow (-\frac{1}{\sqrt{2}})^+} \frac{14x + 9}{x^2 + ax + 12} = \frac{-1 + 9}{(-12) + 12} = \frac{8}{0^+} = +\infty$$

$$\lim_{x \rightarrow 1^+} \frac{x^2 - 1}{x^2 - 1} = \lim_{x \rightarrow 1^+} \frac{x^2 - 1}{x^2 - 1} = \frac{1-1}{1-1} = \frac{0}{0}$$

$$\lim_{x \rightarrow 1^+} \frac{(x^2 - 1)(x + 1)}{(x^2 - 1)(x^2 + 1 + x)} = \lim_{x \rightarrow 1^+} \frac{x + 1}{x^2 + 1 + x} = \frac{2}{3} = \frac{1}{\mu}$$

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$$\lim_{x \rightarrow 0} \frac{x\sqrt{x-1} + x\sqrt{x-1} + \sqrt{1-x}}{\sqrt{2x-1}} \rightarrow \lim_{x \rightarrow 0} \frac{\frac{1}{\sqrt{x-1}} + \frac{x}{\sqrt{x}} - 0}{\frac{1}{\sqrt{x}}}$$

$$\lim_{x \rightarrow 0} \frac{(1+\sqrt{x+1})\sqrt{x-1} + (\sqrt{x-1} + 1)\sqrt{x}}{x(1+\sqrt{x})} = \frac{\sqrt{4}}{1\sqrt{1}} = 2$$

$$\lim_{x \rightarrow 1} \frac{1-K[2]}{2^x-2} = \frac{(-1) \frac{1-K(-1)}{1-1} = \frac{K+1}{0-} = -\infty}{K+1 > 0, K < -1}$$

$$\lim_{x \rightarrow -1} \frac{1-K(-1)}{1 \pm 1} = \frac{1+PK}{0+} = \infty, K < -\frac{1}{P}$$

cos $K\pi < 0$ $\rightarrow$