

$$f(n) = r \left[\frac{r-n}{r} \right] + a \left[\frac{n+r}{r} \right] \quad n = -r \quad \left[\frac{a}{r} \right] = ? \quad \text{☆ ٢. افندي}$$

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

$$\varepsilon - a = r \rightarrow a = r \quad \left[\frac{a}{r} \right] = \left[\frac{r}{r} \right] = 1$$

$$\lim_{n \rightarrow \left(\frac{\pi}{2}\right)^-} [\sin n - 1] \quad \sin \frac{\pi}{2} = 1 \quad [1 - 1] = [0] = 0$$

$$\sin \frac{\pi}{2} < \frac{1}{2} \quad \text{✓}$$

$$\lim_{n \rightarrow -\frac{1}{2}} [\lambda^{n^2} - n] \quad \lambda \times \frac{1}{\lambda} = -1 \quad -1 + \frac{1}{2} = -\frac{1}{2} \quad \left[-\frac{1}{2} \right] = -1$$

$$\frac{-1^+ - 1^-}{2} \text{ ديفرئنس}$$

$$\lim_{n \rightarrow \left(\frac{1}{2}\right)^-} \frac{\ln n - 0 + \left[\frac{r}{n^2} \right]}{\ln n - \left[-\frac{r}{n^2} \right]} \quad \frac{-0^- - 0 + \left[\frac{r}{\frac{1}{2}^+} \right]}{-\lambda^- - \left[-\frac{r}{\frac{1}{2}^+} \right]} = \frac{-0^- - 0 + [1r]}{-\lambda^- - [-\lambda^+]} = \frac{-1r + 1}{-\lambda^- + \lambda} = \frac{1}{-}$$

$$\frac{1}{-} = -\infty \quad -\infty \quad \text{✓}$$

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

$$1 - \cos \pi = 1 + 1 = 2 \quad \text{✓}$$

$$\lim_{n \rightarrow -1} \frac{\sqrt{n+2} - \sqrt{n+1}}{1 + \sqrt{n}} \rightarrow \frac{\frac{r}{\sqrt{n+2}} - \frac{r}{\sqrt{n+1}}}{\frac{r}{\sqrt{n+2}} + \frac{r}{\sqrt{n+1}}} = \frac{-\frac{1}{2} + \frac{2}{2}}{\frac{1}{2} + \frac{2}{2}} = \frac{1}{3}$$

$$\lim_{n \rightarrow 1} \frac{r_n - \sqrt{\sqrt{n} + 0}}{r_n - \sqrt{\sqrt{n} + 1}} \rightarrow \frac{r - \frac{\varepsilon a}{\sqrt{\sqrt{n} + 1}}}{r - \frac{2}{\sqrt{\sqrt{n} + 1}}} = \frac{r - \frac{r}{2}}{r - \frac{2}{2}} = \frac{-\frac{r}{2}}{0} = -\frac{r}{0}$$

$$\lim_{n \rightarrow 0} \frac{a + \sqrt{bn+c}}{n} = \frac{1}{\varepsilon} \quad \frac{ab}{c} = ?$$

$$\frac{a + \sqrt{c}}{0} = \frac{1}{\varepsilon} \rightarrow a + \sqrt{c} = 0 \rightarrow a = -\sqrt{c}$$

$$\frac{-1}{\varepsilon}$$

$$\frac{b}{\sqrt{bn+c}} = \frac{1}{\varepsilon} \rightarrow \sqrt{b} = \sqrt{c} \rightarrow b = \frac{c}{\varepsilon} \quad \frac{ab}{c} = \frac{-\sqrt{c} \times \sqrt{c}}{c} = \frac{-1}{\varepsilon}$$

$$\lim_{n \rightarrow -\pi} \frac{\varepsilon + k \left[\frac{n}{\pi} \right]}{\sin n} = +\infty \quad [-k] = ?$$

$$-\pi^+ \rightarrow \varepsilon + k \left[\frac{-\pi^+}{\pi} \right] \Rightarrow \frac{\varepsilon - \varepsilon k}{0^+} = +\infty \rightarrow \varepsilon - \varepsilon k > 0$$

$$-\pi^- \rightarrow \varepsilon + k \left[\frac{-\pi^-}{\pi} \right] = \frac{\varepsilon - \varepsilon k}{0^-} = +\infty \rightarrow \varepsilon - \varepsilon k < 0 \rightarrow \varepsilon k > \varepsilon$$

$$-\varepsilon < -k < -\frac{\varepsilon}{c} \rightarrow [-k] = -\varepsilon$$

$$\lim_{n \rightarrow \infty} \frac{a\sqrt{n+1} - b}{a\sqrt{n} - b} = \frac{a\sqrt{n} - b}{a\sqrt{n} - b} \rightarrow a = b$$

$$\frac{a\sqrt{n+1} - b}{a\sqrt{n} - b} \rightarrow \frac{a\sqrt{n} \left(\frac{1}{\sqrt{n+1}} \right) - b}{a\sqrt{n} - b} = \frac{a\sqrt{n} \left(\frac{1}{\sqrt{n}} \right) - b}{a\sqrt{n} - b} = \frac{a - b}{a\sqrt{n} - b} = \frac{1}{\sqrt{n}}$$

$$= \frac{1}{\sqrt{n}}$$

$$\frac{1}{\sqrt{n}}$$

برای (n) در (1)

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