

$$\lim_{n \rightarrow \pi} \frac{1 + \cos^n x}{\sin^n x} = \frac{(1 + \cos^n x)(1 + \cos^n x + \cos^n x)}{(1 - \cos^n x)(1 - \cos^n x)(1 + \cos^n x)} \quad (A)$$

$$\frac{1 + 1 + 1}{1 - (-1)} = \frac{3}{2}$$

$$\lim_{x \rightarrow \frac{\pi}{2}} \frac{1 - \tan x}{\sin x - \cos x} = \frac{\cos^2 x + \sin^2 x - \frac{\sin x}{\cos x}}{\sin x - \cos x} \quad (B)$$

$$\begin{aligned} \frac{\cos^n x (\cos^2 x + \sin^2 x) - \sin x}{\cos^n x} &= \frac{\sin x - \cos^n x}{\cos^n x} \\ &= \frac{\sin x - \cos^n x}{\sin x - \cos^n x} \cdot \frac{1}{\cos^n x} \\ &= \frac{1}{\cos^n x} \\ &= \sqrt{1} \end{aligned}$$

$$\lim_{x \rightarrow \frac{\pi}{2}} \frac{\tan^n x - 1}{\cos^n x} = \dots \quad (10)$$

$$\begin{aligned} \frac{\frac{\sin^n x}{\cos^n x} - 1}{\cos^n x} &= \frac{\sin^n x - \cos^n x}{\cos^n x} \\ &= \frac{1}{\cos^n x} \cdot \frac{1}{\sqrt{1}} \\ &= \sqrt{1} \end{aligned}$$

$$\lim_{x \rightarrow 1} \frac{1 - \sqrt{x}}{1 - \sqrt{a-x}} \times \frac{1 + \sqrt{x}}{1 + \sqrt{x}} \times \frac{x + \sqrt{a-x}}{x + \sqrt{a-x}} = \quad (10)$$

$$\frac{(1 - \cancel{x}) (1 + \sqrt{a-x})}{(1 - \cancel{x}) (1 + \sqrt{x})} = -\frac{1}{1} = \boxed{-1}$$

$$\lim_{x \rightarrow \Sigma} \frac{\sqrt{fx + \Sigma} - f}{\sqrt{ax + v} - w} \times \frac{\sqrt{fx + \Sigma} + \Sigma}{\sqrt{fx + \Sigma} + \Sigma} \times \frac{\sqrt{ax + v} + w}{\sqrt{ax + v} + w} = \quad (11)$$

$$\frac{(fx + \Sigma - f^2) \times w}{(ax + v - w^2) (\sqrt{fx + \Sigma} + \Sigma)} = \frac{f_0}{f_0} = \frac{w}{\Sigma}$$

∴ = 1 (✓)

$$\lim_{x \rightarrow 1} \frac{\sqrt{fx + \sqrt{x}} - f}{\sqrt{x} - 1} \times \frac{\sqrt{fx + \sqrt{x}} + f}{\sqrt{fx + \sqrt{x}} + f} \times \frac{\sqrt{x^2} + 1 + \sqrt{x}}{\sqrt{x^2} + 1 + \sqrt{x}} = \quad (12)$$

$$\frac{(fx + \sqrt{x} - f) (\sqrt{x^2} + 1 + \sqrt{x})}{(x - 1) (\sqrt{x^2} + 1 + \sqrt{x})} \Rightarrow \lim_{x \rightarrow 1} \frac{f \left[ (\sqrt{x} - 1) (\sqrt{x} + \frac{\Sigma}{f}) \right]}{\Sigma (\sqrt{x} - 1) (\sqrt{x} + \Sigma)} = \frac{1}{1}$$

1. substitusi

$$\lim_{x \rightarrow 1} \frac{f(x) - v(x) + p}{\partial x^r - \lambda x + p} = \frac{(x-1)(\epsilon x - p)}{(\delta x - \epsilon)(x-1)} = \frac{1}{p}$$

$$\frac{f(x) - v(x) + p (x-1)}{-\epsilon x^r + \epsilon x} \quad f(x) - p$$

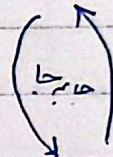
$$\frac{-rx + p}{rx - p}$$

$$\frac{\partial x^r - \lambda x + p (x-1)}{-\delta x^r + \delta x} \quad \delta x - \epsilon$$

$$\frac{-rx + p}{rx - p}$$

$$\lim_{x \rightarrow \epsilon} \frac{x - \epsilon}{\sqrt{x} - \epsilon} \Rightarrow \frac{x - \epsilon}{\sqrt{x} - \epsilon} \times \frac{\sqrt{x} + \epsilon}{\sqrt{x} + \epsilon} = \frac{(x - \epsilon)(\sqrt{x} + \epsilon)}{x - \epsilon}$$

$$= \sqrt{x} + \epsilon = \epsilon$$



$$\lim_{x \rightarrow 0} \frac{|rx - 1| - |rx + 1|}{x}$$

-4x

$$\lim_{x \rightarrow 0^+} \frac{x - rx - rx - 1}{x} = -4$$

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

$$\lim_{x \rightarrow r} \frac{x - \sqrt{rx}}{rx^2 - x - 4} = \frac{x + \sqrt{rx}}{x + \sqrt{rx}} = \frac{x^2 - rx}{(rx + p)(x-1)(x + \sqrt{rx})}$$

$$\frac{rx^2 - x - 4 (x-r)}{rx^2 - x - 4} \quad \frac{rx}{x}$$

$$= \frac{r}{rx} = \frac{1}{\epsilon}$$