

$$\lim_{x \rightarrow 1} \frac{(x-1)(kx-p)}{(x-1)(\Delta x-p)} = \frac{1}{p} \quad \text{بیتا نبره} \quad (1)$$

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

$$\lim_{x \rightarrow k} \frac{x-k}{\sqrt{x}-p} \times \frac{\sqrt{x}+p}{\sqrt{x}+p} = \sqrt{x}+p = k \quad (3)$$

$$\lim_{x \rightarrow p} \frac{x-\sqrt{px}}{(px+p)(x-p)} \times \frac{x+\sqrt{px}}{x+\sqrt{px}} = \frac{x(x-p)}{(px+p)(x-p)(x+\sqrt{px})} = \frac{1}{pk} \quad (4)$$

$$\lim_{x \rightarrow 1} \frac{1-\sqrt{x}}{p-\sqrt{\Delta-x}} \times \frac{1+\sqrt{x}}{1+\sqrt{x}} \times \frac{p+\sqrt{\Delta-x}}{p+\sqrt{\Delta-x}} = -p \quad (5)$$

$$\lim_{x \rightarrow k} \frac{\sqrt{px+k}-k}{\sqrt{\Delta x+v}-p} \times \frac{\sqrt{px+k}+k}{\sqrt{px+k}+k} \times \frac{\sqrt{(\Delta x+v)^2+4+pv}}{\sqrt{(\Delta x+v)^2+4+pv}} = \frac{p}{\Delta} \times \frac{pv}{1} = \frac{pv}{k\Delta} \quad (6)$$

$$\lim_{x \rightarrow 1} \frac{\sqrt{px+\sqrt{x}}-p}{\sqrt{x}-1} \times \frac{\sqrt{px+\sqrt{x}}+p}{\sqrt{px+\sqrt{x}}+p} \times \frac{\sqrt{x^p}+1+\sqrt{x}}{\sqrt{x^p}+1+\sqrt{x}} = \frac{(p)(p)}{(p)(k)} = \frac{p}{k} \quad (7)$$

$$\lim_{x \rightarrow \pi} \frac{1+\cos^p x}{1-\cos^p x} = \frac{(1+\cos x)(1+\cos^p x + \cos^p x)}{(1-\cos x)(1+\cos^p x)} = \frac{p}{p} \quad (8)$$

$$\frac{\cos x - \sin x}{\cos x} = \frac{1}{\cos x} = \sqrt{p} \quad (9)$$

$$\lim_{x \rightarrow \pi} \frac{1-\cos^p x - \cos^p x}{\cos^p x} = \frac{-\cos^p x + \sin^p x}{\cos^p x - (-\cos^p x + \sin^p x)} = -p \quad (10)$$