- Ha $\lim\limits_{x\to x_0} u(x) = 0$ akkor

**h)** $\lim\limits_{x\to x_0} \frac{\sin u(x)}{u(x)} = 1;$ $\lim\limits_{x\to x_0} \frac{\operatorname{tg} u(x)}{u(x)} = 1;$ **i)** $\lim\limits_{x\to x_0} \frac{\arcsin u(x)}{u(x)} = 1;$ $\lim\limits_{x\to x_0} \frac{\operatorname{arctg} u(x)}{u(x)} = 1;$

**j)** $\lim\limits_{x\to x_0} \left[1+u(x)\right]^{\frac{1}{u(x)}} = e;$ $\lim\limits_{x\to x_0} \frac{\ln\left[1+u(x)\right]}{u(x)} = 1;$ **k)** $\lim\limits_{x\to x_0} \frac{a^{u(x)}-1}{u(x)} = \ln a,\ a>0;$

**l)** $\lim\limits_{x\to x_0} \frac{\left[1+u(x)\right]^r - 1}{u(x)} = r,\ r\in\mathbb{R}.$

- Ha $\lim\limits_{x\to x_0} u(x) = +\infty,$ akkor

**m)** $\lim\limits_{x\to x_0} \left[1+\frac{1}{u(x)}\right]^{u(x)} = e;$ **n)** $\lim\limits_{x\to x_0} \frac{\left[u(x)\right]^n}{a^{u(x)}} = 0,\ n\in\mathbb{Z},\ a>1;$ **o)** $\lim\limits_{x\to x_0} \frac{\ln\left[u(x)\right]}{u(x)} = 0.$