(104)

$$\lim_{x\to 0} \frac{3^{\sqrt{1+x}} \log \operatorname{sen} x + 2}{2^{\operatorname{arcsen} x} \log \operatorname{arctg} x + 1} =$$

$$= \lim_{x\to 0} \frac{3^{\sqrt{1+x}} \log \frac{\operatorname{sen} x}{x} \cdot x + 2}{2^{\operatorname{arcsen} x} \log \frac{\operatorname{arctg} x}{x} \cdot x + 1} =$$

$$= \lim_{x\to 0} \frac{3^{\sqrt{1+x}} \left(\log \frac{\operatorname{sen} x}{x} + \log x \right) + 2}{2^{\operatorname{arcsen} x} \left(\log \frac{\operatorname{arctg} x}{x} + \log x \right) + 1} =$$

$$= \lim_{x\to 0} \frac{3^{\sqrt{1+x}} \left(\frac{\log \frac{\operatorname{sen} x}{x}}{\log x} + 1 \right) + \frac{2}{\log x}}{2^{\operatorname{arcsen} x} \left(\frac{\log \frac{\operatorname{arctg} x}{x}}{\log x} + 1 \right) + \frac{1}{\log x}} =$$

$$= \frac{3^{\sqrt{1+0}}(0+1)+0}{2^{0}(0+1)+0} = 3$$