Calcolare i seguenti limiti:

$$\lim_{x\to 1} \frac{1}{\arccos x} = +\infty$$

$$\lim_{x\to 0} \log(\mathrm{arctg} x) = -\infty$$

$$\lim_{x\to +\infty} \left(\frac{1}{3}\right)^{\log x} = 0$$

$$\lim_{x\to +\infty} (\mathrm{arctg} x)^{-8} = \left(\frac{\pi}{2}\right)^{-8}$$

$$\lim_{x\to +\infty} e^{\mathrm{arctg} x} = e^{\frac{\pi}{2}}$$

$$\lim_{x\to +\infty} \left(\frac{1}{2}\right)^{\log x} = 0$$

$$\lim_{x\to 0} \log\left(\frac{1}{\mathrm{arcsen} x}\right) = +\infty$$

$$\lim_{x\to -\infty} \mathrm{arctg}(x^{-6}) = 0$$

$$\lim_{x\to +\infty} \mathrm{arcsen}(x^{-4}) = 0$$

$$\lim_{x\to -\infty} e^{\mathrm{arctg} x} = e^{-\frac{\pi}{2}}$$

$$\lim_{x\to 1} \frac{1}{\arccos x} = +\infty$$

$$\lim_{x\to 0} \left(\frac{1}{2}\right)^{\log x} = +\infty$$

$$\lim_{x\to +\infty} \arccos\left(\left(\frac{1}{3}\right)^{x}\right) = \frac{\pi}{2}$$

$$\lim_{x\to 1} e^{\arccos x} = 1$$

$$\lim_{x\to 0} \log(\mathrm{arcsen} x) = -\infty$$

$$\lim_{x\to 0} \mathrm{arctg}(x^{-6}) = \frac{\pi}{2}$$

$$\lim_{x \to 0} \log(\text{arcsen} x) = -\infty$$

$$\lim_{x \to -\infty} \text{arcsen}(e^x) = 0$$

$$\lim_{x \to +\infty} \log(\text{arctg} x) = \log\left(\frac{\pi}{2}\right)$$

$$\lim_{x \to -\infty} \text{arctg}(x^{-5}) = 0$$