

Limiti da calcolare usando la formula di Taylor

$$1. \quad \lim_{x \rightarrow 0} \frac{e^{x^2} - 1 - x^2 + 5x^4}{\log(1+x^2) - x^2} = -11$$

$$2. \quad \lim_{x \rightarrow 0} \frac{1 - \sqrt{1+x^2} e^x}{x e^x - \log(1+x^2)} = -1$$

$$3. \quad \lim_{x \rightarrow 0} \frac{\operatorname{sen}^2 x - \operatorname{sen} x^2}{\cos^2 x - \cos x^2} = 0$$

$$4. \quad \lim_{x \rightarrow 0} \frac{x^2 - \operatorname{tg}^2 x}{\sqrt{1-4x^2} - 1 + 2x^2} = 1/3$$

$$5. \quad \lim_{x \rightarrow 0} \left(\frac{\operatorname{sen} x}{\log(1+x)} \right)^{1/x}$$

$$6. \quad \lim_{x \rightarrow 0} \frac{\cos^2 x}{x^2} - \frac{1}{\operatorname{sen}^2 x}$$

$$7. \quad \lim_{x \rightarrow 0} \frac{\sqrt{1-x} - \cos \sqrt{x}}{\log(\log(e+x^2))}$$

$$8. \quad \lim_{x \rightarrow 0} \frac{\log(1-x^2) - 2 + 2\sqrt{1+x^2}}{e^{x^2} - 3 + 2 \cos x}$$