

Dati:  $A \subseteq \mathbf{R}$ ,  $f : A \rightarrow \mathbf{R}$ ,  $x_0 \in \mathbf{R}$ ,  $\ell \in \mathbf{R}$ ,  $\varepsilon > 0$ ,  $\delta > 0$ ,

- Tracciare il grafico di  $f$
- Tracciare l'intervallo  $]\ell - \varepsilon, \ell + \varepsilon[$  sull'asse  $y$
- Tracciare l'intervallo  $]x_0 - \delta, x_0 + \delta[$  sull'asse  $x$
- Stabilire se l'affermazione  $|f(x) - \ell| < \varepsilon \quad \forall x \in (]x_0 - \delta, x_0 + \delta[ \setminus \{x_0\}) \cap A$  é VERA o FALSA

$$A = [-1, 1], f(x) = \arcsen x, x_0 = 0, \ell = 0, \varepsilon = \pi, \delta = 2$$

$$A = [-1, 1], f(x) = \arcsen x, x_0 = 0, \ell = 0, \varepsilon = \frac{\pi}{2}, \delta = 1$$

$$A = [-1, 1], f(x) = \arcsen x, x_0 = 0, \ell = 0, \varepsilon = \frac{\pi}{4}, \delta = 1$$

$$A = [-1, 1], f(x) = \arcsen x, x_0 = 0, \ell = 0, \varepsilon = \frac{\pi}{2}, \delta = \frac{1}{2}$$

$$A = \mathbf{R}, f(x) = \sen x, x_0 = 0, \ell = 0, \varepsilon = 2, \delta = \pi$$

$$A = \mathbf{R}, f(x) = \cos x, x_0 = 0, \ell = 0, \varepsilon = 2, \delta = \pi$$

$$A = ]-\frac{\pi}{2}, \frac{\pi}{2}[, f(x) = \operatorname{tg} x, x_0 = 0, \ell = 0, \varepsilon = 1, \delta = \frac{\pi}{2}$$

$$A = [-1, 1], f(x) = \arccos x, x_0 = 0, \ell = 0, \varepsilon = \pi, \delta = 2$$

$$A = \mathbf{R}, f(x) = \operatorname{arctg} x, x_0 = 0, \ell = \frac{\pi}{2}, \varepsilon = \pi, \delta = 1$$

$$A = \mathbf{R}, f(x) = e^x, x_0 = 1, \ell = 0, \varepsilon = 1, \delta = 1$$

$$A = \mathbf{R}, f(x) = e^x, x_0 = -1, \ell = 0, \varepsilon = 1, \delta = 1$$

$$A = ]0, +\infty[, f(x) = \log x, x_0 = 1, \ell = 0, \varepsilon = 1, \delta = 1$$

$$A = ]0, +\infty[, f(x) = \log x, x_0 = 1, \ell = 0, \varepsilon = 1, \delta = 2$$

$$A = \mathbf{R}, f(x) = -x, x_0 = -3, \ell = 3, \varepsilon = 2, \delta = 1$$

$$A = \mathbf{R}, f(x) = -x, x_0 = -3, \ell = 3, \varepsilon = 1, \delta = 1$$

$$A = \mathbf{R}, f(x) = x^2, x_0 = 0, \ell = 0, \varepsilon = 1, \delta = 2$$

$$A = \mathbf{R} \setminus \{0\}, f(x) = \frac{|x|}{x}, x_0 = 0, \ell = 0, \varepsilon = 2, \delta = 2$$

$$A = \mathbf{R} \setminus \{0\}, f(x) = \frac{|x|}{x}, x_0 = 0, \ell = 0, \varepsilon = 2, \delta = 1$$

$$A = \mathbf{R} \setminus \{0\}, f(x) = \frac{|x|}{x}, x_0 = 1, \ell = 0, \varepsilon = 2, \delta = 2$$

$$A = \mathbf{R} \setminus \{0\}, f(x) = \frac{|x|}{x}, x_0 = 0, \ell = 1, \varepsilon = 2, \delta = 1$$

$$A = ]3, 4[ \cup ]4, +\infty[, f(x) = \frac{\log(x-3)}{x-4}, x_0 = 4, \ell = 1, \varepsilon = 1, \delta = 1$$