

***** disequazione $f(x) \leq 0$ *****

$$f(x) := \frac{x + 2}{x + 8}$$

SOLVE($f(x) \leq 0, x$)

$$-8 < x \leq -2$$

graf := [$f(x)$, SOLVE($f(x) \leq 0, x$), SOLVE($f(x) = 0, x$)]

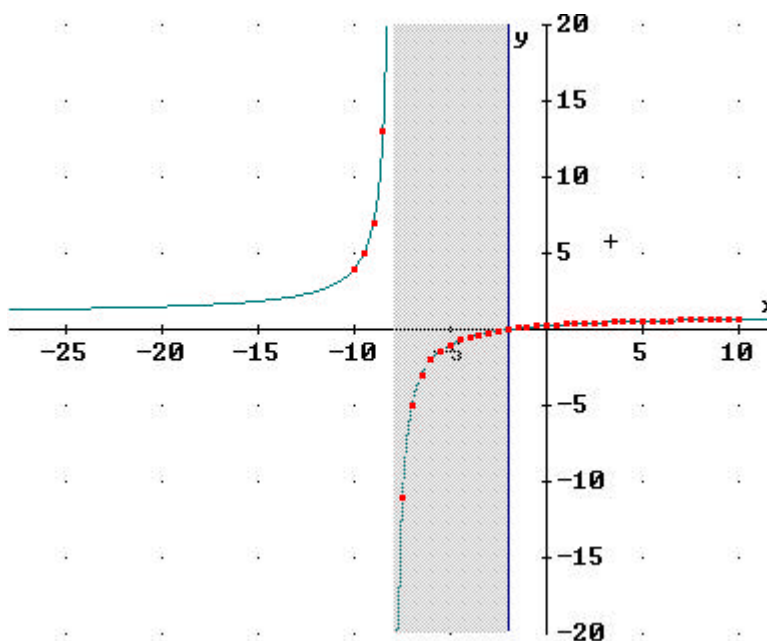
$$\left[\frac{x + 2}{x + 8}, -8 < x \leq -2, x = -2 \right]$$

[raggio := 10, passo := 0.5]

ascisse := [-raggio, -raggio + passo, ..., raggio]

punto(x) := [x , $f(x)$]

campionamento := VECTOR(punto(x), x, ascisse)



SOLVE($f(x) = \infty, x$)

$$x = \pm\infty \vee x = -8$$

$$x = \pm\infty \vee x = -8$$

[$f(-\infty)$, $f(-8)$, $f(\infty)$]

[?, $\pm\infty$, ?]

$$\left[\lim_{x \rightarrow -\infty} f(x), \lim_{x \rightarrow -8} f(x), \lim_{x \rightarrow -8-} f(x), \lim_{x \rightarrow -8+} f(x), \lim_{x \rightarrow \infty} f(x) \right] = [1, \pm\infty, \infty, -\infty, 1]$$

dominio(y) := SOLVE(SOLVE($y \leq 0, x$) \vee SOLVE($y > 0, x$), x)

dominio($f(x)$)

$$x \neq -8$$