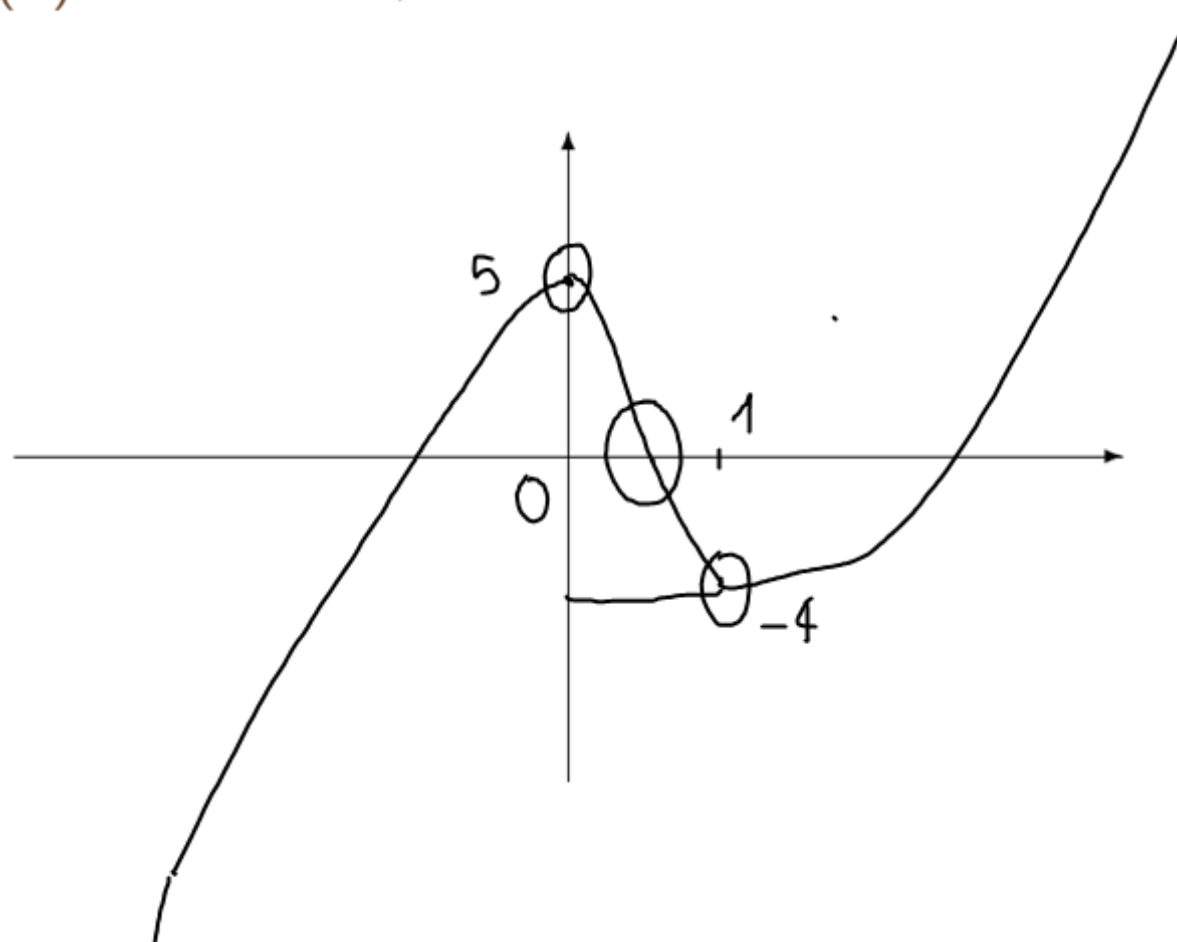


Un problema “concreto”

$$y = f(x) = x^3 - 10x^2 + 5$$



Una stima del metodo

$$(b_n - a_n) = \frac{b_{n-1} - a_{n-1}}{2} = \dots = \frac{b_0 - a_0}{2^n} = \frac{L}{2^n} < \varepsilon$$

se vogliamo che

$$(b_n - a_n) < \varepsilon$$

dobbiamo iterare il procedimento

$$n = \left\lceil \frac{\ln(L/\varepsilon)}{\ln(2)} \right\rceil + 1$$

$$\frac{1}{2^n} < \frac{\varepsilon}{L}$$

$$2^n > \frac{L}{\varepsilon}$$

$$n > \log_2(L/\varepsilon)$$

$$\frac{\ln(L/\varepsilon)}{\ln(2)}$$