

$$f(x) = \exp(x) \approx r(x) = \frac{n(x)}{d(x)} = \frac{cx^2 + dx + e}{x^2 + ax + b}$$

coincido e sono di $O(x^5)$

$$= 1 + x + \frac{x^2}{2} + \frac{x^3}{3!} + \frac{x^4}{4!} + O(x^5)$$

$$f(x) = \frac{x^2 + 6x + 12}{x^2 - 6x + 12} + O(x^5)$$

$g(x)$:



$$x \in [-w, w] \Rightarrow \frac{|g(x)|}{|x|} \leq u$$

Trovo w risolvendo $g(x) - u \cdot x = 0$

$$\Rightarrow \text{Per } \|A\| < 6.32 \cdot 10^{-4}, \quad D(A)^{-1}N(A) = \exp(A+H), \quad \text{con } \frac{\|H\|}{\|A\|} < u.$$

$$N(x) = N_e(x^2) + N_d(x^2) \cdot x$$

$$D(x) = N_e(x^2) - N_d(x^2) \cdot x$$

mi basta calcolare separatamente $N_e(x^2)$ e $N_d(x^2)$