

Prova libera n. 11 - Soluzioni

1. $4k < t < 4k + 1$ con $k \in \mathbf{Z}$ e $k \leq -1$.
2. $-\frac{1}{10}, 6$.
3. e^{-12} .
4. $P(x) = x^2(x - 1)$.
5. $0 \leq \alpha \leq e/6$.
6. la prima e la seconda.
7. $0, \pi/2$.
8. $\sup A = 2, \inf A = -1/2$.
9. $\frac{e^\pi + 1}{2(e^\pi - 1)}$.
10. non esiste alcun α, β .
11. $e(e + 1)/(e - 1)^3$.
12. $\{\alpha > 1, \beta \in \mathbf{R}\} \cup \{\alpha = 1, \beta > 1\}$.
13. $y(x) = x + (1 - e^{2x})/(1 + e^{2x})$.
14. $a = 0$, con $y(x) = \begin{cases} 2e^x - x^2 - 2x - 2 & \text{se } x \geq 0 \\ -2e^{-x} + x^2 - 2x + 2 & \text{se } x \leq 0. \end{cases}$