



COGNOME _____ NOME _____

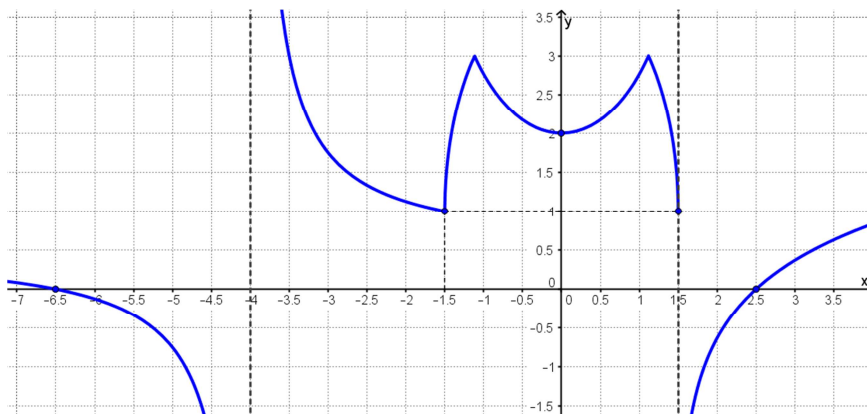
Dal grafico di $y = f(x)$ deduci le informazioni richieste: _____ / 4

Dominio:

Codominio:

Coordinate dei punti di intersezione con gli assi:

Intervalli di positività:



$\lim_{x \rightarrow -4^-} f(x) = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow -4^+} f(x) = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow \frac{3}{2}^-} f(x) = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow \frac{3}{2}^+} f(x) = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow \frac{3}{2}} f(x) = \underline{\hspace{2cm}}$

Calcola i seguenti limiti:

1. $\lim_{x \rightarrow 0} \frac{x^3 + 2x}{5x + 2 \operatorname{sen} x}$ _____ / 1,5
2. $\lim_{x \rightarrow -2^+} \frac{\operatorname{sen}(x + 2)}{x^2 + 4x + 4}$ _____ / 1
3. $\lim_{x \rightarrow 2} \frac{2x^2 - x + 1}{2^{2x} - 2^x + 2}$ _____ / 1,5
4. $\lim_{x \rightarrow \pi} \frac{e^{\cos x} + \operatorname{sen} x}{\sqrt{1 + \operatorname{tg} x}}$ _____ / 1,5
5. $\lim_{x \rightarrow -\infty} \left(\frac{x + 2}{x - 1} \right)^x$ _____ / 1,5
6. $\lim_{x \rightarrow 0} (1 + 4x)^{\frac{5}{x}}$ _____ / 1,5
7. $\lim_{x \rightarrow +\infty} (\sqrt{x^2 + 1} - \sqrt{x^2 - 4})$ _____ / 1,5
8. $\lim_{x \rightarrow +\infty} \frac{x^2 + 3x^4}{2x^2 - x + 5x^4}$ _____ / 1
9. $\lim_{x \rightarrow 0} 2x \operatorname{ctg} x$ _____ / 1
10. $\lim_{x \rightarrow +\infty} (2 - x) \log x$ _____ / 1
11. $\lim_{x \rightarrow 0} \frac{\log_3(1 + 2x)}{2x}$ _____ / 1
12. $\lim_{x \rightarrow 0} \frac{3^x - 1}{2x}$ _____ / 2
13. $\lim_{x \rightarrow 3} \frac{\log_3 x + \log_3 \frac{3}{x}}{x - 2}$ _____ / 1
14. $\lim_{x \rightarrow -\infty} \frac{e^x}{x}$ _____ / 1
15. $\lim_{x \rightarrow +\infty} (1 - x^2) e^x$ _____ / 1
16. $\lim_{x \rightarrow -2^-} \frac{4x + 3}{x^2 - 4}$ _____ / 1
17. $\lim_{x \rightarrow 3} \frac{x^3 + x^2 - 12x}{x^3 - 3x^2 + 2x - 6}$ _____ / 1,5
18. $\lim_{x \rightarrow +\infty} \frac{x^2 - 3x^4}{2x^2 - x + 4x^4}$ _____ / 1

1	2	3	4	5	6	7	8	9	10
$x=0$	$0 < x < 4,5$	$4,5 \leq x < 7,5$	$7,5 \leq x < 10,4$	$10,4 \leq x < 14,1$	$14,1 \leq x < 16,3$	$16,3 \leq x < 19,2$	$19,2 \leq x < 22,2$	$22,2 \leq x < 26,5$	$x=26,5$

