

Funzioni definite graficamente

Periodo 3 - UdA 1

Rappresentare graficamente le seguenti funzioni continue senza tratti orizzontali:

- | | | | |
|-----|---|--|--|
| 1. | $f :]-5, 0[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -5} f(x) = 0$ | $\lim_{x \rightarrow 0} f(x) = -\infty$ |
| 2. | $f : [1, 4[\longrightarrow \mathbb{R}$ | $f(1) = 0$ | $\lim_{x \rightarrow 4} f(x) = +\infty$ |
| 3. | $f :]0, 5[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 0} f(x) = 0$ | $\lim_{x \rightarrow 5} f(x) = +\infty$ |
| 4. | $f : [-3, 0] \longrightarrow \mathbb{R}$ | $f(-3) = 0$ | $f(0) = 0$ |
| 5. | $f :]-3, -1[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -3} f(x) = 0$ | $\lim_{x \rightarrow -1} f(x) = -3$ |
| 6. | $f :]0, 5[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 0} f(x) = 0$ | $\lim_{x \rightarrow 5} f(x) = +\infty$ |
| 7. | $f :]-5, -3[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -5} f(x) = -\infty$ | $\lim_{x \rightarrow -3} f(x) = -\infty$ |
| 8. | $f :]-4, -2[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -4} f(x) = -1$ | $\lim_{x \rightarrow -2} f(x) = -\infty$ |
| 9. | $f :]-4, 0[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -4} f(x) = +\infty$ | $\lim_{x \rightarrow 0} f(x) = 1$ |
| 10. | $f :]1, 4[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 1} f(x) = -\infty$ | $\lim_{x \rightarrow 4} f(x) = -3$ |
| 11. | $f : [-4, 0[\longrightarrow \mathbb{R}$ | $f(-4) = 0$ | $\lim_{x \rightarrow 0} f(x) = -\infty$ |
| 12. | $f :]-3, 0[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -3} f(x) = +\infty$ | $\lim_{x \rightarrow 0} f(x) = +\infty$ |

- | | | | |
|-----|---|--|--|
| 13. | $f :]-3, -1] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -3} f(x) = -\infty$ | $f(-1) = -3$ |
| 14. | $f : [2, 4] \longrightarrow \mathbb{R}$ | $f(2) = 4$ | $f(4) = 1$ |
| 15. | $f : [-5, -1[\longrightarrow \mathbb{R}$ | $f(-5) = 0$ | $\lim_{x \rightarrow -1} f(x) = -\infty$ |
| 16. | $f : [1, 4[\longrightarrow \mathbb{R}$ | $f(1) = -2$ | $\lim_{x \rightarrow 4} f(x) = -4$ |
| 17. | $f :]0, 4[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 0} f(x) = -2$ | $\lim_{x \rightarrow 4} f(x) = -\infty$ |
| 18. | $f :]1, 3] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 1} f(x) = 3$ | $f(3) = 0$ |
| 19. | $f :]0, 4] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 0} f(x) = -\infty$ | $f(4) = -2$ |
| 20. | $f :]-4, -1[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -4} f(x) = 3$ | $\lim_{x \rightarrow -1} f(x) = 3$ |
| 21. | $f :]-5, -1] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -5} f(x) = +\infty$ | $f(-1) = 3$ |
| 22. | $f : [-2, 0[\longrightarrow \mathbb{R}$ | $f(-2) = 2$ | $\lim_{x \rightarrow 0} f(x) = 2$ |
| 23. | $f :]-4, 0[\longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -4} f(x) = 0$ | $\lim_{x \rightarrow 0} f(x) = +\infty$ |
| 24. | $f :]0, 5] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow 0} f(x) = -\infty$ | $f(5) = -4$ |
| 25. | $f :]-5, -1] \longrightarrow \mathbb{R}$ | $\lim_{x \rightarrow -5} f(x) = +\infty$ | $f(-1) = 4$ |
| 26. | $f : [2, 4[\longrightarrow \mathbb{R}$ | $f(2) = 0$ | $\lim_{x \rightarrow 4} f(x) = 0$ |