Funzioni definite graficamente

Periodo 3 - UdA 1

Rappresentare graficamente le seguenti funzioni continue senza tratti orizzontali:

1. $f :]-\infty, -2] \longrightarrow \mathbb{R}$ $\quad \lim_{x\to-\infty} f(x) = -3$ $\quad f(-2) = -1$
2. $f :]-\infty, -2[\longrightarrow \mathbb{R}$ $\quad \lim_{x\to-\infty} f(x) = +\infty$ $\quad \lim_{x\to-2} f(x) = 0$
3. $f :]2, +\infty[\longrightarrow \mathbb{R}$ $\quad \lim_{x\to2} f(x) = 1$ $\quad \lim_{x\to+\infty} f(x) = +\infty$
4. $f : [0, +\infty[\longrightarrow \mathbb{R}$ $\quad f(0) = -3$ $\quad \lim_{x\to+\infty} f(x) = 0$
5. $f : [1, +\infty[\longrightarrow \mathbb{R}$ $\quad f(1) = 0$ $\quad \lim_{x\to+\infty} f(x) = 0$
6. $f : [3, +\infty[\longrightarrow \mathbb{R}$ $\quad f(3) = 2$ $\quad \lim_{x\to+\infty} f(x) = +\infty$
7. $f : [1, +\infty[\longrightarrow \mathbb{R}$ $\quad f(1) = 0$ $\quad \lim_{x\to+\infty} f(x) = -\infty$
8. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\quad \lim_{x\to0} f(x) = -\infty$ $\quad \lim_{x\to+\infty} f(x) = -\infty$
9. $f :]-\infty, -1] \longrightarrow \mathbb{R}$ $\quad \lim_{x\to-\infty} f(x) = +\infty$ $\quad f(-1) = 0$
10. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\quad \lim_{x\to0} f(x) = 0$ $\quad \lim_{x\to+\infty} f(x) = 0$
11. $f : [0, +\infty[\longrightarrow \mathbb{R}$ $\quad f(0) = 0$ $\quad \lim_{x\to+\infty} f(x) = 0$
12. $f :]2, +\infty[\longrightarrow \mathbb{R}$ $\quad \lim_{x\to2} f(x) = 0$ $\quad \lim_{x\to+\infty} f(x) = -3$

13. $f :]3, +\infty[\longrightarrow \mathbb{R}$ $\lim_{x \to 3} f(x) = -\infty$ $\lim_{x \to +\infty} f(x) = -\infty$

14. $f :]-\infty, 0] \longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = +\infty$ $f(0) = 2$

15. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\lim_{x \to 0} f(x) = -3$ $\lim_{x \to +\infty} f(x) = 0$

16. $f :]-\infty, 0[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 0$ $\lim_{x \to 0} f(x) = +\infty$

17. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\lim_{x \to 0} f(x) = 0$ $\lim_{x \to +\infty} f(x) = -\infty$

18. $f :]-\infty, -3[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 0$ $\lim_{x \to -3} f(x) = 1$

19. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\lim_{x \to 0} f(x) = -3$ $\lim_{x \to +\infty} f(x) = -\infty$

20. $f :]-\infty, -3[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 2$ $\lim_{x \to -3} f(x) = +\infty$

21. $f :]-\infty, -1[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 4$ $\lim_{x \to -1} f(x) = 1$

22. $f :]-\infty, -2[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 0$ $\lim_{x \to -2} f(x) = +\infty$

23. $f :]-\infty, -3[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = 0$ $\lim_{x \to -3} f(x) = 0$

24. $f :]-\infty, 0[\longrightarrow \mathbb{R}$ $\lim_{x \to -\infty} f(x) = -1$ $\lim_{x \to 0} f(x) = -\infty$

25. $f : [0, +\infty[\longrightarrow \mathbb{R}$ $f(0) = -4$ $\lim_{x \to +\infty} f(x) = -2$

26. $f :]0, +\infty[\longrightarrow \mathbb{R}$ $\lim_{x \to 0} f(x) = 2$ $\lim_{x \to +\infty} f(x) = 2$