4. $f(x) = x^3 + x$ 1. $D = IR$ 2. $f(0) = 0$ 3. sem assistates being events. 4. $f'(x) = 3x^2 + 1$ $3x^2 + 1 = 0$ não seiste x que notisfaça 5. $f''(x) = 6x$ $f''(x) = 0$ quando $x = 0$ 6. x $f''(x) = 0$ f''	áleulo 1	stem	art, val 1	, ad 5	, was	ł.5		- T	
1. $D = R $ 2. $f(0) = 0$ 3. sem assimtates being rowth. 4. $f'(x) = 3x^2 + 1$ $3x^2 + 1 = 0$ não existe × que notingos 5. $f''(x) = 6x$ $f''(x) = 0$ quando $x = 0$ 6. x $x = 0$ 0 pento de influço, roig $(0,0)$ $x > 0$ 0 0 0 0 0 0 0							Elxl- s	+ (x) 2 Cc	
4. $f'(x) = 3x^2 + 1$ $3x^2 + 1 = 0$ $x^2 + 1 = 0$ $x = 0$ 6. x $x = 0$ 9. $x = 0$ 9. $x = 0$ 18. $f'(x) = \frac{x^2 - 9}{x^2 - 9}$ 19. $x = 0$ 10. $x = 0$ 11. $x = 0$ 12. $x = 0$ 13. $x = 0$ 14. $x = 0$ 15. $x = 0$ 16. $x = 0$ 17. $x = 0$ 18. $x = 0$ 19. $x = 0$ 10. $x = 0$ 10. $x = 0$ 11. $x = 0$ 12. $x = 0$ 13. $x = 0$ 14. $x = 0$ 15. $x = 0$ 16. $x = 0$ 17. $x = 0$ 18. $x = 0$ 19. $x = 0$ 10. $x =$			2. F(0) =	. 0	3				
$3x^{2}+1=0$ $5 \cdot F''(x)=6 \times$ $5 \cdot F''(x)=6 \times$ $5 \cdot F''(x)=6 \times$ $5 \cdot F''(x)=0$ $6 \cdot X \cdot F \cdot F' \cdot F''(x)$ $7 \cdot F \cdot $			(4)	e()				V	
5. $f''(x) = 6 \times f''(x) = 0$ quands $x = 0$ 6. x $f''(x) = 0$ f''	3x2+	1=0							
$x=0$ 0 \Rightarrow \Rightarrow conserve \Rightarrow	5. F"(x) = 6	×							
x=0 0 panto de influcio, raig $(0,0)x>0 \oplus \oplus creants, C. C18 f(x) = \frac{x}{x^2-9}1 D = \{x \in \mathbb{R} \mid x \neq \pm 3\}2 f(0) = \frac{0}{-9} = 0, (0,0)3 \lim_{x \to \infty} x = +\infty \lim_{x \to -\infty} x = -\infty sem arxintatos hari.x \to \infty x^2-9 x \to -\infty x^2-94 \lim_{x \to 3} x^2-9 x \to 3^+ x^2-9 x \to 3^+ x^2-9$	6. ×	F	f'	E"	1 4	5 M &	e to		
x=0 0 panto de influcio, raig $(0,0)x>0 \oplus \oplus creants, C. C18 f(x) = \frac{x}{x^2-9}1 D = \{x \in \mathbb{R} \mid x \neq \pm 3\}2 f(0) = \frac{0}{-9} = 0, (0,0)3 \lim_{x \to \infty} x = +\infty \lim_{x \to -\infty} x = -\infty sem arxintatos hari.x \to \infty x^2-9 x \to -\infty x^2-94 \lim_{x \to 3} x^2-9 x \to 3^+ x^2-9 x \to 3^+ x^2-9$	×40	€ D chessente, C.B							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	×=-0	0	1-X = V						
18 $f(x) = \frac{x}{x^2 - 9}$ 1 $D = \{x \in IR \mid x \neq \pm 3\}$ 2 $f(0) = \frac{0}{-9} = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = \pm 00$ $\lim_{x \to -\infty} x = -\infty$ sem maintains have. $\lim_{x \to \infty} x^2 - 9$ $\lim_{x \to -\infty} x = \pm 0$ $\lim_{x \to 3} x = -3$ $\lim_{x \to 3} x^2 - 9$ $\lim_{x \to 3^+} x^2 - 9$	×70	0							
13 $f(x) = \frac{x}{x^2 - 9}$ 1 $D = \{x \in IR \mid x \neq \pm 3\}$ 2 $f(0) = \frac{0}{-9} = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = \pm 00$ $\lim_{x \to -\infty} x = -\infty$ sem assimtates havi. 2 $\lim_{x \to \infty} x = \pm 0$ $\lim_{x \to -\infty} x = \pm 0$ $\lim_{x \to -\infty} x = -\infty$ 4 $\lim_{x \to 3} x^2 - 9$ $\lim_{x \to 3^+} x^2 - 9$ $\lim_{x \to 3^+} x^2 - 9$		AY	1		T	T.			
18 $f(x) = \frac{x}{x^2 - 9}$ 1 $D = \{x \in IR \mid x \neq \pm 3\}$ 2 $f(0) = \frac{0}{-9} = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = \pm 00$ $\lim_{x \to -\infty} x = -\infty$ sem assimtates havi. 10 $\lim_{x \to \infty} x = \pm 0$ $\lim_{x \to -\infty} x = \pm 0$ $\lim_{x \to -\infty} x = -\infty$ 11 $\lim_{x \to \infty} x = \pm 0$ $\lim_{x \to -\infty} x = \pm 0$ $\lim_{x \to -\infty} x = -\infty$ 12 $\lim_{x \to -\infty} x = -\infty$					12/		1, -4	+ [4-1.	
18 $f(x) = \frac{x}{x^2 - 9}$ 1 $D = \{x \in IR \mid x \neq \pm 3\}$ 2 $f(0) = 9/-9 = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = +00$ $\lim_{x \to -\infty} x = -\infty$ sem assintates havi. $x \to \infty$ $x^2 - 9$ $x \to -\infty$ $x^2 - 9$ 4 $\lim_{x \to 3} x^2 - 9$		/	/						
18 $f(x) = \frac{x}{x^2 - 9}$ 1 $D = \{x \in IR \mid x \neq \pm 3\}$ 2 $f(0) = \frac{0}{-9} = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = +\infty$ $\lim_{x \to -\infty} x = -\infty$ som assimilators havi. $\lim_{x \to \infty} x^2 - 9$ $\lim_{x \to -\infty} x = +\infty$ $\lim_{x \to 3} x = -3$ $\lim_{x \to 3} x^2 - 9$ $\lim_{x \to 3} x^2 - 9$	of the state of th								
1 $D = \{x \in \mathbb{R} \mid x \neq \pm 3\}$ 2 $f(0) = 9 = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = +\infty$ $\lim_{x \to -\infty} x = -\infty$ som assintatos hai. $\lim_{x \to \infty} x^2 - 9$ $\lim_{x \to -\infty} x = +\infty$ $\lim_{x \to 3} x = -3$ $\lim_{x \to 3} x^2 - 9$ $\lim_{x \to 3^+} x^2 - 9$		1-1		Alger Alle		1-1-1-1			
1 $D = \{x \in \mathbb{R} \mid x \neq \pm 3\}$ 2 $f(0) = 9/-9 = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = +\infty$ $\lim_{x \to -\infty} x = -\infty$ som assintatos hai. $x \to \infty$ $x^2 - 9$ $\lim_{x \to -\infty} x = +\infty$ $\lim_{x \to -\infty} x = -3$ $x \to 3$ $x^2 - 9$ $\lim_{x \to 3^+} x^2 - 9$	13 f(x) =	×2-9	A.Z.	in v	C		- ()	500	
2 $f(0) = 9/-9 = 0$, $(0,0)$ 3 $\lim_{x \to \infty} x = +\infty$ $\lim_{x \to -\infty} x = -\infty$ sem assintates havi. 4 $\lim_{x \to 3} x^2 - 9$									
3 $\lim_{x \to \infty} x = +\infty$ $\lim_{x \to -\infty} x = -\infty$ sem assintates have. 4 $\lim_{x \to 3} x^2 - 9$									
$x \to \infty$ $x^2 - 9$ $x \to -\infty$ $x^2 - 9$ 4 $\lim_{x \to 3} x^2 - 9$									
	x>00 x2	-9	*	7-00	x2-9	1		The state of the s	
	4 Jim X	(A-5-	-00 li	~	X_ =	+000	x = 3	2 x = -3	
	x > 3 x2	-9	×→	3+ x	2-9	4		1026-2	
2 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0		and the state of	0,0)	13.00	· d		10	4127	
(tilibra)					Q.	40			

