

Ex 320-932

17
81

$$f(x, y) = \frac{1}{x - y^2}$$

$$D = \text{Dom } f = \{(x, y) \in \mathbb{R}^2 : x - y^2 \neq 0\}$$

$$= \{(x, y) \in \mathbb{R}^2 : x \neq y^2\}$$

Dom e f, Defn
pelo $D = \text{int } D$



$$\text{int } D = D$$

$$\text{Fr } D = \{(x, y) \in \mathbb{R}^2 : x = y^2\}$$

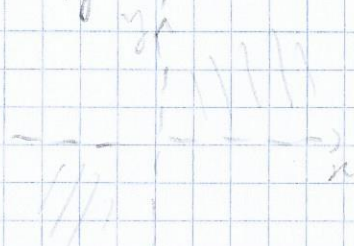
$$\text{Fecho } D \text{ ou aderencia} = D \cup \text{Fr } D$$

Derivada $D = \text{conj. e pontos de acumulação}$

18) $f(x, y) = \ln(xy)$

$$D = \text{Dom } f = \{(x, y) \in \mathbb{R}^2 : xy > 0\}$$

$$\begin{cases} x > 0 \\ y > 0 \end{cases} \quad \vee \quad \begin{cases} x < 0 \\ y < 0 \end{cases}$$



$$\text{int } D = D$$

Fr $D \Rightarrow \infty \times \infty$ coordenado

$$\text{Fecho } D = D \cup \text{Fr } D \Rightarrow$$

Derivada $D = \text{Fecho } D$
 $= \mathbb{R}^2$



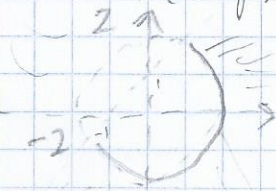
Cap. 4 exercicio 1

1) $f(x, y) = \sqrt{x^2 + y^2 - 4} + \log(x - y + 1)$

Determina Domio f ?

$$D = \text{Dom } f = \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 - 4 \geq 0 \text{ on } x - y + 1 > 0\}$$

$$= \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 \geq 4 \text{ e } y < 1 + x\}$$



$$\text{int } D = \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 > 4 \text{ e } y < 1 + x\}$$

$$\text{Fr } D =$$



(0, 1) e (1, 0) e (2, 0) e (3, 0) e (4, 0) e (5, 0) e (6, 0) e (7, 0) e (8, 0) e (9, 0) e (10, 0) e (11, 0) e (12, 0) e (13, 0) e (14, 0) e (15, 0) e (16, 0) e (17, 0) e (18, 0) e (19, 0) e (20, 0) e (21, 0) e (22, 0) e (23, 0) e (24, 0) e (25, 0) e (26, 0) e (27, 0) e (28, 0) e (29, 0) e (30, 0) e (31, 0) e (32, 0) e (33, 0) e (34, 0) e (35, 0) e (36, 0) e (37, 0) e (38, 0) e (39, 0) e (40, 0) e (41, 0) e (42, 0) e (43, 0) e (44, 0) e (45, 0) e (46, 0) e (47, 0) e (48, 0) e (49, 0) e (50, 0) e (51, 0) e (52, 0) e (53, 0) e (54, 0) e (55, 0) e (56, 0) e (57, 0) e (58, 0) e (59, 0) e (60, 0) e (61, 0) e (62, 0) e (63, 0) e (64, 0) e (65, 0) e (66, 0) e (67, 0) e (68, 0) e (69, 0) e (70, 0) e (71, 0) e (72, 0) e (73, 0) e (74, 0) e (75, 0) e (76, 0) e (77, 0) e (78, 0) e (79, 0) e (80, 0) e (81, 0) e (82, 0) e (83, 0) e (84, 0) e (85, 0) e (86, 0) e (87, 0) e (88, 0) e (89, 0) e (90, 0) e (91, 0) e (92, 0) e (93, 0) e (94, 0) e (95, 0) e (96, 0) e (97, 0) e (98, 0) e (99, 0) e (100, 0)