

$$A \times B = \{(1,2), (1,3), (2,2), (2,3), (3,2), (3,3)\}$$

$$B^2 = \{(1,2), (2,2), (3,2), (3,3)\}$$

$$A \times B - B^2 = \{(1,2), (1,3), (2,2), (2,3), (3,2), (3,3)\} - \{(1,2), (2,2), (3,2), (3,3)\} \\ = \{(1,3), (2,3)\}$$

۱

$$\text{الف } (m^2, m^2) = (m^2, m+2) \rightarrow m^2 = m+2 \rightarrow m^2 - m - 2 = 0, \Delta = 1+8=9, m^2 - 2ac$$

$$\frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-1 \pm \sqrt{9}}{2} = \frac{-1 \pm 3}{2} \rightarrow \begin{cases} \frac{-1+3}{2} = 1 \\ \frac{-1-3}{2} = -2 \end{cases}$$

$$\text{ب } (m^2, m^2) = (m^2, m+2) \rightarrow m^2 = m+2 \rightarrow m^2 - m - 2 = 0, \Delta = b^2 - 4ac = 1+8=9, \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-1 \pm \sqrt{9}}{2} = \frac{-1 \pm 3}{2}$$

$$a=1 \Rightarrow x^2 - 1 \leq a x + b = 1 - 1 \leq a x + b = 0$$

$$a=1 \Rightarrow x^2 \leq a x + b \leq x^2 \leq x a + b = 1$$

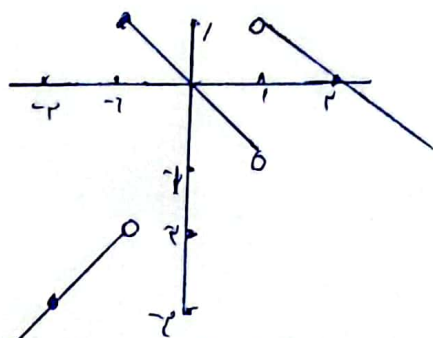
$$x a + b = 1$$

$$-a + b \leq 0 \rightarrow 1 + b \leq 0 \rightarrow b \leq -1$$

$$a \times b = 1 \times (-1) = -1$$

$$n \leq k \leq \Rightarrow \forall k - 3 \leq k - 3k$$

$$0 \leq k \leq 3 \quad (k \leq \frac{3}{2})$$



$$D_f \subseteq \mathbb{R} - \{1\}$$

$$R_f = (-\infty, 1]$$

۴

۵

