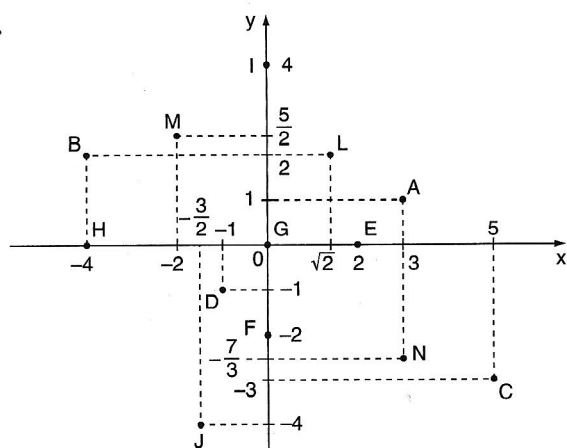


35.



36. $A(4, 2)$ $D(4, -5)$ $G(0, -6)$
 $B(-4, 6)$ $E(0, 4)$ $H(5, 0)$
 $C(-5, -3)$ $F(-3, 0)$ $I(0, 0)$

37. a) $x = 2$ e $y = -5$

b) $\begin{cases} x + 4 = 5 \\ y - 1 = 3 \end{cases}$; daí, $x = 1$ e $y = 4$

c) $\begin{cases} x + y = 3 \\ x - 3y = 7 \end{cases}$; daí, $x = 4$ e $y = -1$

38. $\begin{cases} m^2 = 16 \Rightarrow m = +4 \text{ ou } m = -4; \text{ daí, } m = -4 \\ m + 4 = 0 \Rightarrow m = -4 \end{cases}$

39. $m - 3 = 0 \Rightarrow m = 3$

40. $m^2 - 1 = 0 \Rightarrow m = +1 \text{ ou } m = -1$

41. $m - 5 = 0 \Rightarrow m = 5$

$2 - n = 0 \Rightarrow n = 2$

42. a) $a < 0$ e $b > 0$

b) Como $-a > 0$ e $b > 0$, o ponto Q pertence ao 1º quadrante.

43. a) $-a < 0 \Rightarrow a > 0$

$b < 0$

b) Como $a > 0$ e $b < 0$, o ponto S pertence ao 4º quadrante.

44. a) Sim, a cada x há um y .

b) Para $x \in \mathbb{R}$

c) Pois existem duas imagens para todo x negativo.

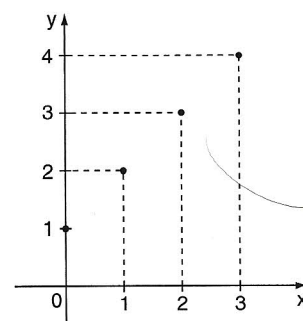
d) Duas imagens para $x = -3$.

g) $D = \{1\}$ e $x = 1$ tem infinitas imagens.

e) O domínio não é real; os x tais que $-1 < x < 1$ não têm imagem.

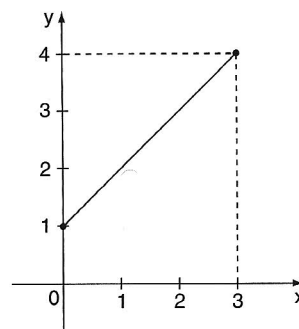
45. a) $A = \{0, 1, 2, 3\}$

$\text{Im} = \{1, 2, 3, 4\}$



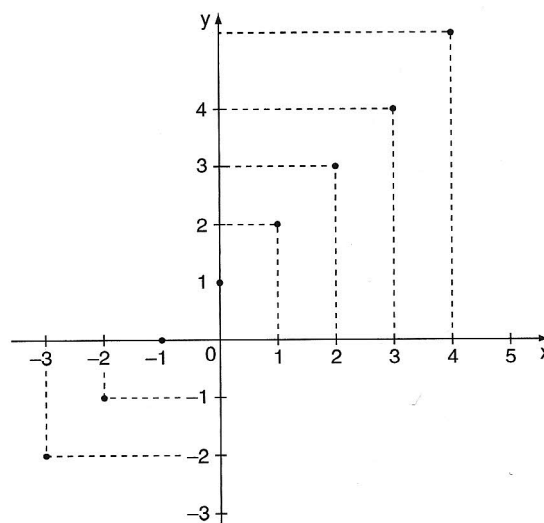
b) $A = [0, 3]$

$\text{Im} = [1, 4]$

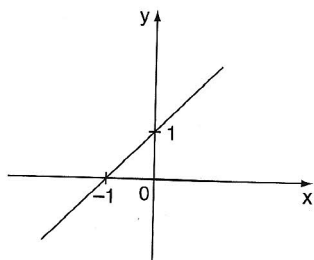


c) $A = \mathbb{Z}$

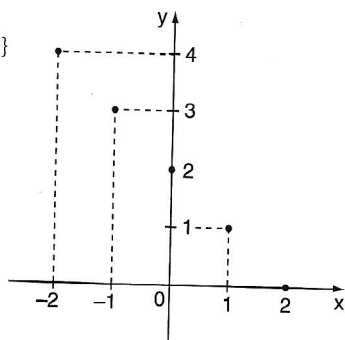
$\text{Im} = \mathbb{Z}$



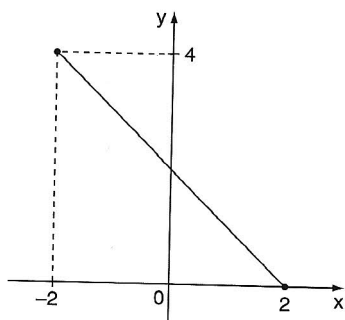
d) $A = \mathbb{R}$
 $Im = \mathbb{R}$



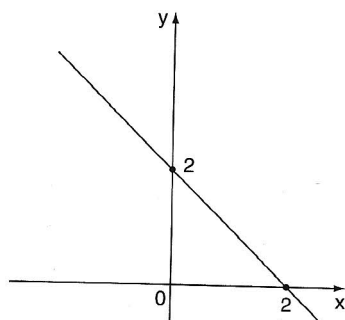
46. a) $A = \{-2, -1, 0, 1, 2\}$
 $Im = \{4, 3, 2, 1, 0\}$



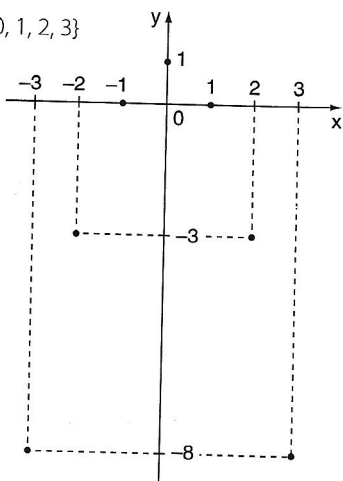
b) $A = [-2, 2]$
 $Im = [0, 4]$



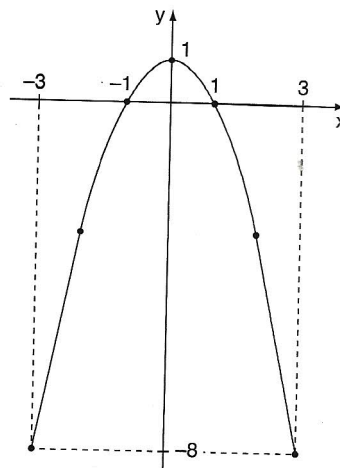
c) $A = \mathbb{R}$
 $Im = \mathbb{R}$



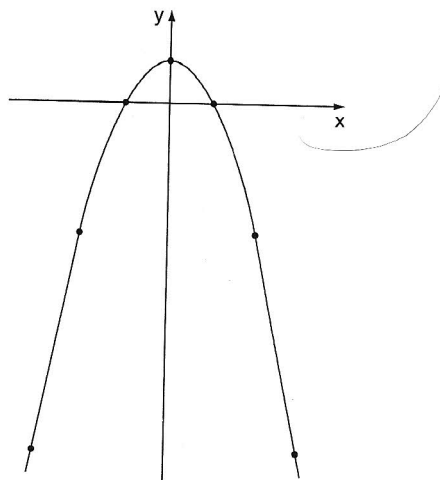
47. a) $A = \{-3, -2, -1, 0, 1, 2, 3\}$
 $Im = \{-8, -3, 0, 1, 0, -3, -8\}$



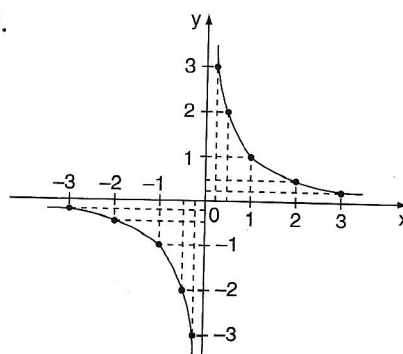
b) $A = [-3, 3]$
 $Im = [-8, 1]$



c) $A = \mathbb{R}$
 $Im = \mathbb{R}$



48.



49. $y = 2x + b$

Pelo gráfico, se $x = 0, y = 3$

$$3 = 2 \cdot 0 + b \text{ e } b = 3$$

50. $y = ax^2 + b$

Pelo gráfico, se $x = 0, y = 2$

$$2 = a \cdot 0^2 + b$$

$$b = 2$$

Agora, $y = ax^2 + 2$

Pelo gráfico, se $x = 1, y = 3$

$$3 = a \cdot 1^2 + 2 \Rightarrow a = 1$$