

# Lista 4

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2-

*	a	b	c	d
a	a	b	c	d
b	b	d	a	c
c	c	a	d	b
d	d	c	b	a

8-

*	e	a	b	c
e	e	a	b	c
a	a	b	c	e
b	b	c	e	a
c	c	e	a	b

$$13-a) \langle 2s, + \rangle \Rightarrow \{2s, 0, -2s, 50, -50\}$$

$$b) \langle \frac{1}{2}, * \rangle \Rightarrow \{\frac{1}{2}, 1, 2, \frac{1}{4}, 4\}$$

$$c) \langle \pi, * \rangle \Rightarrow \{\pi, 1, \frac{1}{\pi}, 2\pi, \frac{1}{2\pi}\}$$

$$15- E = \{(a, b) \in G^2 : a^{-1} * b \in H\}$$

$$[a] = \{b \in G / (a, b) \in E\} \Rightarrow [a] = \{b \in G / a^{-1} * b = h \in H\}$$



$$16- \quad G = \{1, -1, i, -i\}, \quad H = \{1, -1\}$$

$$[1] = 1 \cdot \{1, -1\} = \{1, -1\}$$

$$[-1] = -1 \cdot \{1, -1\} = \{-1, 1\}$$

$$[1] = [-1]$$

$$[i] = i \cdot \{1, -1\} = \{i, -i\}$$

$$[-i] = -i \cdot \{1, -1\} = \{-i, i\}$$

$$[i] = [-i]$$