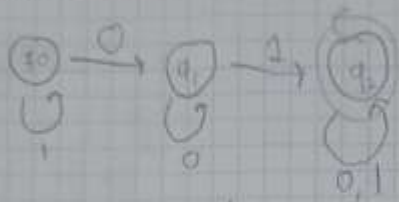


### Problema 1



Lenguajes aceptados:

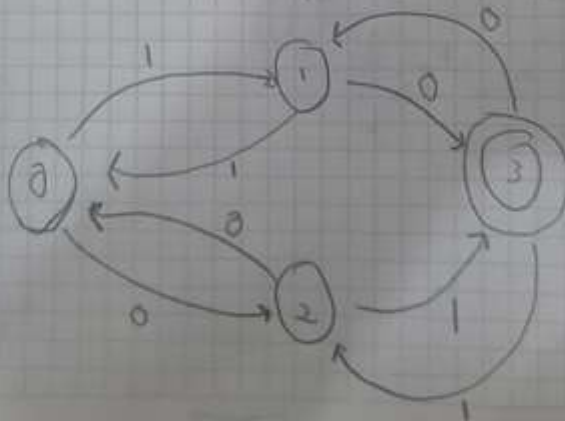
2. 111000100 ✓

3. 00000111 ✓

El lenguaje es  $= \{w \in \{0,1\}^+ \mid w \text{ donde hay un } 1 \text{ después de algún } 0\}$

### Problema 2

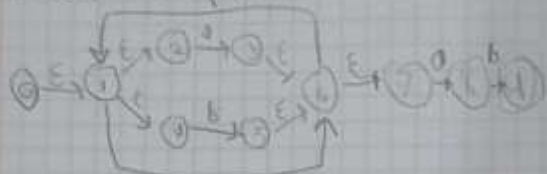
$L = \{w \in \{0,1\}^+ \mid w \text{ número impar de 1's y impar de 0's}\}$



### Problema 3

$\Sigma = \{a, b\}$ :

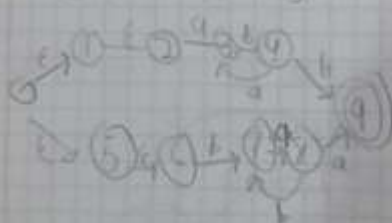
1.  $(a|b)^* a b$ .



2.  $(a b^* ) b (b^* a)$



3.  $(a b)^* b (b^* a)$



# Problem 4

$$E_0 = \{0\}$$

$$E(1) = \{2, 4, 1\}$$

$$E(2) = \{2\}$$

$$E(3) = \{3, 4, 1, 2\}$$

$$E(4) = \{4, 1, 2\}$$

$$E(5) = \{5, 6, 7, 4\}$$

$$E(6) = \{6, 7\}$$

$$E(7) = \{7\}$$

$$E(8) = \{9, 6, 7, 8\}$$

$$E(9) = \{9\}$$

$$E(10) = \{10\}$$