$$b) M_b \longrightarrow q_0 \longrightarrow q_1 \longrightarrow q_2$$

$$Q = \frac{1}{4}q_0, q_1, q_2$$

 $Z = \frac{1}{4}q_1, b_1$
 $q_0 = \frac{1}{4}q_0$ estados finales

8	a	6	€
9.	79,7	19,9,4	Ø
9,	ø	1926	{q _e }
42	49, 8	ø	ø

Aplicamos el teorema 2.1 para hallar M_b DFA tal que $L(M_b) = L(M_b')$

tenemos que
$$\begin{bmatrix} q_0 \end{bmatrix} = iq_0$$
 $\begin{bmatrix} q_1 \end{bmatrix} = iq_1$ $\begin{bmatrix} q_1 \end{bmatrix} = iq_1, q_2$ $\end{bmatrix} = \begin{bmatrix} q_1, q_2 \end{bmatrix} = iq_2, q_3$ $\end{bmatrix} = iq_1, q_2$ $\end{bmatrix} = iq_1, q_2$ $\end{bmatrix} = iq_1, q_2, q_3$ $\end{bmatrix} = iq_1, q_1, q_2$ $\end{bmatrix} = iq_2, q_1, q_3$

$$Q := \{\emptyset, [4], [4], [4], [4], [4, 4], [4, 4]\} \subseteq Q(Q)$$

$$Q := \{[4], [4], [4, 4], [4, 4]\}$$

Recordar que $S^{1}[q] \times := \{P \in Q : \exists q_{i} \in [q] \text{ tal que } q_{i} \xrightarrow{X} P \}$

8, 1	a	Ь
[q]	[q,]	[4,4,]
[9t]	$[q_i]$	[q]
[8+5]	[9,]	Ø
[4,4,] [a, a]	[4.]	[9,9]
[q,q]	[4,]	[q,q,]
Ø	Ø	Ø
	'	

lugo
$$M'_b := (Q, \Sigma, S', [q], \alpha \Sigma)$$
es el DFA tal que $\mathcal{L}(M'_b) = \mathcal{L}(M_b)$

$$\Rightarrow \boxed{\begin{bmatrix} q \\ b \end{bmatrix}} \xrightarrow{a} \qquad \boxed{\begin{bmatrix} q \\ b \end{bmatrix}} \xrightarrow{b} \qquad \boxed{\begin{bmatrix} q \\ b \end{bmatrix}}$$

$$\downarrow b \qquad \qquad \downarrow b$$

$$\downarrow b \qquad \qquad \downarrow b$$

$$\downarrow b \qquad \qquad \downarrow b$$

$$\downarrow \begin{bmatrix} q \\ q \\ b \end{bmatrix} \qquad \boxed{\begin{bmatrix} q \\ q \\ b \end{bmatrix}}$$

$$\downarrow b \qquad \qquad \downarrow b$$