

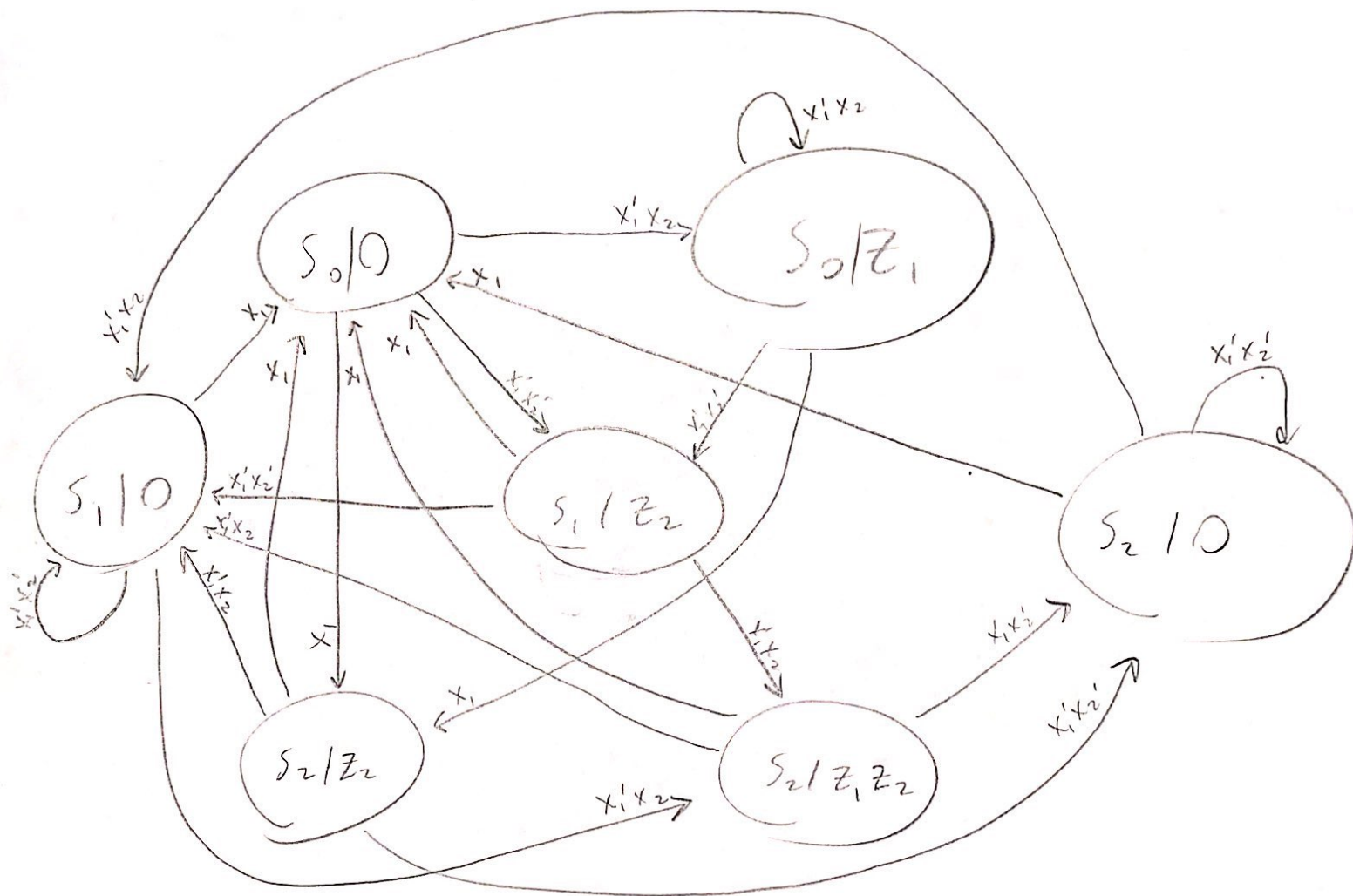
Present State	Next State					
	X_1		$X_1' X_2$		$X_1' X_2'$	
	state	o/p	state	o/p	state	o/p
S_0	S_2	Z_2	S_0	Z_1	S_1	Z_2
S_1	S_0	0	S_2	Z_1, Z_2	S_1	0
S_2	S_0	0	S_1	0	S_2	0

of states

$S_2 \rightarrow 3$
 $S_1 \rightarrow 2$
 $S_0 \rightarrow 2$

} 7 states

Present State	Next state			Output
	X_1	$X_1' X_2$	$X_1' X_2'$	
$S_0, 0$	$S_2 Z_2$	$S_0 Z_1$	$S_1 Z_2$	0
S_0, Z_1	$S_2 Z_2$	$S_0 Z_1$	$S_1 Z_2$	Z_1
$S_1, 0$	$S_0 0$	$S_2 Z_1, Z_2$	$S_1 0$	0
S_1, Z_2	$S_0 0$	$S_2 Z_1, Z_2$	$S_1 0$	Z_2
$S_2, 0$	$S_0 0$	$S_1 0$	$S_2 0$	0
S_2, Z_2	$S_0 0$	$S_1 0$	$S_2 0$	Z_2
S_2, Z_1, Z_2	$S_0 0$	$S_1 0$	$S_2 0$	Z_1, Z_2



Rubric

- (A) 1 point for showing correct inputs
 1 point for showing correct outputs
 3 points for getting correct answer

- (B) 5 points for correct # of states
 3 points for correct output associated with each state
 2 points for correct connections