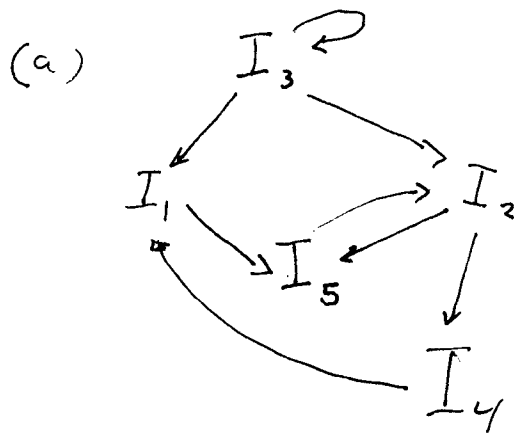
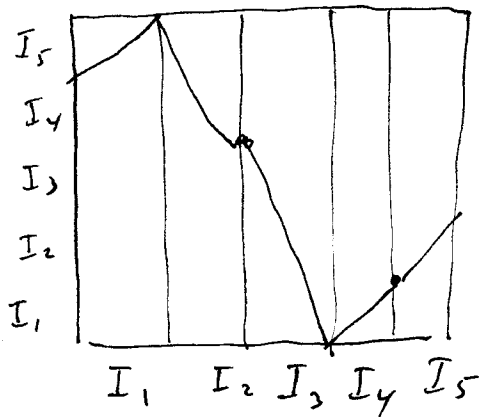


Math 313-1 Test 2. Feb 20, 2002.

②



(b)	n	Symbol	Yes/No
	1	3^∞	Yes
	2	$(52)^\infty$	Yes
	3		No
	4	$(5241)^\infty$	Yes
	5		No
	6	$(525241)^\infty$	Yes
	7		No
	8	$[(52)^3 41]^\infty$	Yes
	9		No
	$2(n+1)$	$[(52)^n 41]^\infty$	Yes

There are all even periods. No odd periods except 1.

All paths are even length except repeating 3 which has length 1.

Once the path leaves 3 it can not return.

Therefore all periodic paths are combinations of (52) & (4152) which have even length.