

SUBJECT: Dennis George Exercise 5

DATE: 4 / 15 / 21

1. a) turn could be either  
1 or 2.

b)  $p3 \Rightarrow (\text{turn} == 1)$   
 $q3 \Rightarrow (\text{turn} == 2)$

2. Prove  $(\text{turn} == 1) \vee (\text{turn} == 2)$

1. initial state  
 $\text{turn} = 1$

$(\text{turn} == 1 \vee \text{turn} == 2)$		
T	V	F
	T	

2. case:

@ P3  $(\text{turn} == 1 \vee \text{turn} == 2)$   
From P2: T V F  
T

@ Q3  $(\text{turn} == 1 \vee \text{turn} == 2)$   
From Q2: F V T  
T

QED