

**CS 386/586: Quiz 8, 22 Nov 2011 Name: \_\_\_\_\_ KEY \_\_\_\_\_**

No books or notes. Work individually.

For each schedule below, determine if it could arise under strict 2-phase locking.

**If so:** Show a placement of shared locks (S), exclusive locks (X) and lock releases (Rel) that is strict 2-phase and obeys lock-acquisition rules.

**If not:** Indicate the first point in the schedule at which some transaction will be unable to get a lock it needs.

a. *No*

T1:	S(A)R(A)		R(B)		W(B)
T2:		<del>X(A)</del> W(A)	<i>can't get exclusive lock on A</i>		
T3:			W(A)		R(B)

b. *No*

T1:	S(A)R(A)		S(B)R(B)		W(B)
T2:		S(A)R(A)Rel			
T3:			<del>X(A)</del> W(A)	<i>can't get X lock on A R(B)</i>	

c. *Yes*

T1:	S(A)R(A)		S(B)R(B)		X(B)W(B)Rel
T2:		S(A)R(A)Rel			
T3:			S(A)R(A)		S(B)R(B)Rel