COS418 Precept 8 - Consistency

11/17/17

Circle the degree of consistency satisfied by each of the following sequence of reads and writes.

Q1	Strict consistency
	Linearizability
	Sequential consistency
	Causal consistency
	Eventual consistency

Q2

P1:	W(x) 3				W(y) 7		
P2:		W(x) 1					
P3:			R(x) 1	R(x) 3		R(y) 7	
P4:			R(x) 1	R(x) 3		R(y) 7	
P5:			R(x) 1	R(x) 3		R(y) 7	

Strict consistency
Linearizability
Sequential consistency
Causal consistency
Eventual consistency

Q3

P1:	W(x) 3				W(y) 7		
P2:		W(x) 1					
P3:			R(x) 1	R(x) 3		R(y) 7	
P4:			R(x) 3	R(x) 1		R(y) 7	
P5:			R(x) 1	R(x) 3		R(y) 7	

Strict consistency
Linearizability
Sequential consistency
Causal consistency
Eventual consistency

Q4	Strict consistency
P1: W(x) 1	Linearizability
P2: W(x) 3	Sequential consistency
P3: W(x) 7	Causal consistency
P4: R(x) 3 R(x) 7 R(x) 1	Eventual consistency
P5: R(x) 3 R(x) 1 R(x) 7	

Q5	Strict consistency
	Linearizability
	Sequential consistency
	Causal consistency
	Eventual consistency

Q6	Strict consistency
P1: W(x) 1	Linearizability
P2: R(x) 1 W(x) 3	Sequential consistency
P3: R(x) 3 W(x) 7	Causal consistency
P4: R(x) 3 R(x) 7 R(x) 1	Eventual consistency
P5: R(x) 3 R(x) 1 R(x) 7	