

# LOGICAL DATA FLOWS

**1** Logic Components

A	B	C
F	F	F
F	T	F
T	F	F
T	T	T

P	Q	R
F	F	F
F	T	T
T	F	T
T	T	T

X	Y
F	T
T	F

**2**

K	L	K or L	M
F	F	F	T
F	T	T	F
T	F	T	F
T	T	T	F

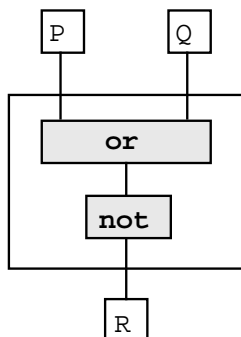
**3** Play Ball:  
(Inning 9 or Tied) and not Rain

**4** Truth Table for Play Ball

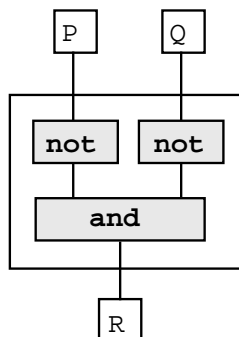
I	9	S1=S2	Rain	Play
F	F	F	F	F
F	F	T	T	F
F	T	F	F	T
F	T	T	T	F
T	F	F	F	T
T	F	T	T	F
T	T	F	F	T
T	T	T	T	F

## DeMorgan's Law

**5**  $\text{not}(p \text{ or } q)$



**6**  $\text{not}(P) \text{ and } \text{not}(Q)$



**7** Proof of DeMorgan

P	Q	Left	Right
F	F	T	T
F	T	F	F
T	F	F	F
T	T	F	F