

# 3.3 Discrete Math day 2

Review Exercise pg 157 #6-9 all  
 Exercise pg 158 18, 19-31 odd, 37-41 odd

(18)  $(1,1), (1,4), (2,2), (2,5), (3,3), (4,1), (4,4), (5,2), (5,5)$

(19)  $(1,1) (4,1) (2,2) (5,2) (3,3) (1,4) (4,4) (2,5) (5,5)$

(21)  $R = (2,1) (3,2) (4,3) (5,4) \quad R^{-1} = (1,2) (2,3) (3,4) (4,5)$

(23) Reflexive - NO  
 Symmetric - NO  
Anti symmetric - YES  
 Transitive - NO  
 Partial order - NO

(25) REFLEXIVE - NO  
 Symmetric - NO  
ANTI symmetric - YES  
 TRANSITIVE - YES  
 PARTIAL order - NO

(27) REFLEXIVE - YES  
 Symmetric - YES  
 Anti symmetric - YES  
 TRANSITIVE - YES  
 PARTIAL order = YES

(29) REFLEXIVE - YES  
 Symmetric - YES  
 Anti Symmetric - NO  
 TRANSITIVE - YES  
 PARTIAL order - NO

(31) REFLEXIVE - NO  
 Symmetric - YES  
 Anti symmetric - NO  
 TRANSITIVE - NO  
 PARTIAL order - NO

