

題目

題目與注意事項

作答區

解題

完成作業小時數

Homework 09 題目

- (Prob. 1) page 608, chapter 9.1 Exercise 6
- (Prob. 2) page 619, chapter 9.2 Exercise 2
- (Prob. 3) page 627, chapter 9.3 Exercise 14
- (Prob. 4) page 638, chapter 9.4 Exercise 20
- (Prob. 5) page 647, chapter 9.5 Exercise 24
- (Prob. 6) page 662, chapter 9.6 Exercise 8

注意事項

- (a) 要熟悉 LaTeX 請翻閱 [lshort](#)。
- (b) 記得在最後一頁，回報完成作業小時數 (估算，取整數)。
- (c) 將檔案夾命名為 hw09_107820xxx，將檔案夾壓縮成 hw09_107820xxx.zip，上傳到網路學園。
- (d) LaTeX 數學符號請查此表: [List of LaTeX mathematical symbols](#)。
- (e) 作業抄襲，以零分計。作業提供給他人抄襲，以零分計。
- (f) 作業遲交一週內成績打五折，作業遲交超過一週以零分計。

Problem 1 (9.1 Exercise 6)

- (a) not reflexive, symmetric, not antisymmetric, not transitive.
- (b) reflexive, symmetric, not antisymmetric, transitive.
- (c) reflexive, symmetric, not antisymmetric, transitive.
- (d) not reflexive, not symmetric, antisymmetric, not transitive.
- (e) reflexive, symmetric, not antisymmetric, not transitive.
- (f) not reflexive, symmetric, not antisymmetric, not transitive.
- (g) not reflexive, not symmetric, antisymmetric, transitive.

Problem 2 (9.2 Exercise 2)

$(6, 1, 1, 1), (1, 6, 1, 1), (1, 1, 6, 1), (1, 1, 1, 6), (3, 2, 1, 1), (3, 1, 2, 1),$
 $(3, 1, 1, 2), (2, 3, 1, 1), (2, 1, 3, 1), (2, 1, 1, 3), (1, 3, 2, 1), (1, 3, 1, 2),$
 $(1, 2, 3, 1), (1, 2, 1, 3), (1, 1, 3, 2), (1, 1, 2, 3)$

Problem 3 (9.3 Exercise 14)

$$(a) \begin{bmatrix} 0 & 1 & 0 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$$

$$(b) \begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 1 \\ 1 & 0 & 0 \end{bmatrix}$$

$$(c) \begin{bmatrix} 0 & 1 & 1 \\ 1 & 1 & 1 \\ 0 & 1 & 0 \end{bmatrix}$$

$$(d) \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 0 & 1 & 0 \end{bmatrix}$$

$$(e) \begin{bmatrix} 0 & 0 & 0 \\ 1 & 0 & 0 \\ 0 & 1 & 1 \end{bmatrix}$$

Problem 5 (9.5 Exercise 24)

(是非題)

- (a) This is not an equivalence relation.
- (b) This is an equivalence relation.
- (c) This is an equivalence relation.

Problem 6 (9.6 Exercise 8)

(是非題)

- (a) not a partial order
- (b) partial order
- (c) not a partial order

完成作業小時數

完成作業小時數:共4小時(估算,取整數)