

CSc 245 Discrete Structures - Summer 2020

Quiz #4

Due: July 14th, 2020 by 11:59 pm (MST)

1. (10 Points) Consider the relation  $R = \{(0, 2), (1, 3), (2, 4), (3, 5)\}$  on the set  $A = \{0, 1, 2, 3, 4, 5\}$ .

(a) Describe the relation in set builder notation.

$\{(x, y) | \underline{\hspace{10cm}}\}$

(b) Specify true or false for each of the following properties. If false, list the ordered pairs that would need to be added to satisfy the property.

- $R$  is Reflexive
  
  
- $R$  is Symmetric
  
  
- $R$  is Antisymmetric
  
  
- $R$  is Transitive