

CS201: Math for CS I/Discrete Mathematics  
Assignment 2 Solution

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## 1. Problem 1 Solution

### 1.1 Part (a)

We are given a set  $S = N$  and a relation  $a | b$ .

**To Prove:** Relation  $R = a | b$  is equivalence relation

$\forall a \in N, aRa, a | a$  satisfies as  $a$  is divisible by  $a$ , thus  $R$  is *reflexive*.

$\forall a \in N, aRb \wedge bRa \Rightarrow a$ , as if