Worksheet 6 Review

March 24, 2020

Question 1

a. $\forall n \in \mathbb{N}, \ P(123) \wedge \neg(n > 123 \Rightarrow P(n))$

   Correct Solution:

   $P(123) \wedge (\forall n \in \mathbb{N}, P(n) \Rightarrow n \leq 123)$

b. $IsCD(x,y): \ \exists x, y, d \in \mathbb{Z}, \ d \mid x \wedge d \mid y$

   $IsGCD(x,y): \ \exists x, y, d \in \mathbb{Z}, d \mid x \wedge d \mid y \wedge (\forall n \in \mathbb{N}, n > d \Rightarrow n \nmid x \vee n \nmid y)$

Question 2

Question 3