

Worksheet 6 Review 2

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April 13, 2020

Question 1

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

Correct Solution:

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

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

$$IsGCD(x, y, d) : \forall n \in \mathbb{N}, IsCD(x, y, n) \Rightarrow \exists d \in \mathbb{N}, IsCD(x, y, d) \wedge n \leq d$$

Question 2

Question 3