Worksheet 11 Review

March 30, 2020

Question 1

a. $\forall a, b \in \mathbb{R}^+, a \leq b \Rightarrow (\exists c, n_0 \in \mathbb{R}^+, \forall n \in \mathbb{N}, n \geq n_0 \Rightarrow g(n) \leq cf(n))$

Correct Solution:

$$\forall a, b \in \mathbb{R}^+, \ a \le b \Rightarrow (\exists c, n_0 \in \mathbb{R}^+, \ \forall n \in \mathbb{N}, \ n \ge n_0 \Rightarrow \frac{n^a}{n} \le cn^b)$$

b.

Question 2

Question 3