

In-Class Worksheet

Discrete Math & Functional Programming— CSCI 054— Spring 2025

Instructor: Osborn

Claim: $\{x \in \mathbb{Z} : 18|x\} \subseteq \{x \in \mathbb{Z} : 6|x\}$

Claim: $\{x \in \mathbb{Z} : 18|x\} = \{x \in \mathbb{Z} : 6|x\}$

Claim: $\{x \in \mathbb{Z} : 18|x\} \subset \{x \in \mathbb{Z} : 6|x\}$

Consider the function $g : \mathbb{Z} \times \mathbb{Z} \rightarrow \mathbb{Z}$, where $g(x, y) = xy - 1$.

Is g onto?

Is g one-to-one?