

1. Prove that

$$\{n \in \mathbb{Z} : n = 7 + 10k \text{ for some } k \in \mathbb{Z}\} = \{n \in \mathbb{Z} : n = 10k - 3 \text{ for some } k \in \mathbb{Z}\}$$

2. Let A , B , and C be sets. Prove that if $A \subseteq B$, then $C - B \subseteq C - A$.