Homework 5

due Thursday, October 12

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 $C - B \subseteq C - A$.