MATH 2112 / CSCI 2112
Assignment # 2
Due Wednesday, September 27, 2006

Section 1.3: 23, 29, 30, 33, 34, 35, 44
Section 2.1: 15, 16, 21, 27, 28, 31
Section 2.2: 2, 10, 19, 21, 30, 32
Section 2.3: 12, 15, 17, 43

Determine whether the following statements are true or false. Explain why.

1. $\forall x \in \mathbb{Z}, \exists y \in \mathbb{R}$ s. t. $x = 2y$.
2. $\exists y \in \mathbb{R}$ s. t. $\forall x \in \mathbb{Z}, x = 2y$.
3. $\forall x \in \mathbb{Z}, \forall y \in \mathbb{Z}, xy \in \mathbb{Z}$.
4. $\exists x \in \mathbb{N}, \exists y \in \mathbb{N}$ s. t. $x/y = y/x$.