Quiz 7 **Name:**_____

Math 568

February 12, 2008

1. (3 points). What is the definition of a *linear transformation*?

2. (2 points). A linear transformation $R : \mathbb{R}^2 \to \mathbb{R}^2$ is defined by reflecting each vector across the line $y = x$. What is the corresponding 2×2 matrix?