Nov 24, 2010

## METU, Fall 2010, Math 111, Section 1.

## Quiz 2

1. If $A=\{1,2,3\}$, then give an example of a relation $R$ from $A$ to $A$ with 4 elements.

- Find $R^{-1}$.
- Find $R \circ R^{-1}$.

2. Define $F=\{(x, y) \in \mathbf{R} \times \mathbf{R}:|x|=|y|\}$.

- $\forall x \in \mathbf{R}(\exists y \in \mathbf{R}(x F y))$. True or false? Explain.
- Is $F$ a function? Justify your answer.

