

# Homework #1

Raymond Deneckere

Fall 2014

1. Let  $f : \mathbb{R} \rightarrow \mathbb{R}$  be given by the rule  $f(x) = x^3 - x$ . By restricting the domain and range of  $f$  appropriately, obtain from  $f$  a bijective function  $g$ . Draw the graphs of  $g$  and  $g^{-1}$  (there are several possible choices for  $g$ ).
2. Sundaram, #5, p. 67.
3. Sundaram, #9, p.67.
4. Sundaram, #13, p.68.
5. Sundaram, #17, p.68.