

Quiz 1

Math 344

Week One

1 Computations

1. Let $A = \{1, 2, 3, 4\}$ and $B = \{x, y, z\}$
 - (a) Write down three functions from A to B that are injective, or write down “there are none”.
 - (b) Write down three functions from B to A that are injective, or write down “there are none”.
 - (c) Write down any function from B to B whose image is $\{x\}$.
(Write down any function f from B to B such that $f(B) = \{x\}$.)
(Write down any function f from B to B such that $\text{range}(f) = \{x\}$.)
(Write down any function f from B to B such that $\text{im}(f) = \{x\}$.)
(Write down any function f from B to B such that $f^{-1}(\{x\}) = B$.)