Quiz 3, Intro Adv Math. Name:

1. Let $f : S \to T$.
   (This means: S and T are sets, and f is a function from S to T).

   Write down the definitions:

   (a) f is injective when:

   (b) f is surjective (a.k.a. onto) when:

2. The function $f : \mathbb{N} \to \mathbb{N}$ given by $f(x) = 2x$ is

   (a) injective? (select: True or False, no proof needed)

   (b) surjective? (select: True or False, no proof needed)