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)