Math 215: Introduction to Advanced Mathematics
Problem Set 7

Due: Friday October 26

Do the following problems from the text: pg 117-118: 14, 16, 18, 19,

1) Suppose $f : X \to Y$, $g : Y \to Z$ and $g \circ f$ is surjective.
   a) Must f be surjective?
   b) Must g be surjective?
Justify your answers by giving a proof or a counter-example.