Math 3100 Quiz 6

Name _____

1. (5 points) Carefully state the definition of the following:
   (a) $\{a_n\}$ is a Cauchy sequence.
   (b) $\{a_n\}$ is a convergent sequence.
   (c) $\{a_n\}$ is a bounded sequence.

2. (5 points) Prove <u>one</u> of the following:
   (a) If $\{a_n\}$ is a convergent sequence, then $\{a_n\}$ is a Cauchy sequence.
   (b) If $\{a_n\}$ is a Cauchy sequence, then $\{a_n\}$ is a bounded sequence.