NAME _____

1. Suppose S is a nonempty subset of $\mathbb R.$ Define "x is $\sup S.$ "

2. Suppose x is an upper bound for a nonempty subset, S of \mathbb{R} . State a necessary and sufficient criterion for x to be sup S. (This criterion should not repeat the definition.)

3. State the Completeness Axiom.

4. State the Archimedean Property.

5. Suppose (x_n) is a sequence. Define " (x_n) converges to x."