Write a short paragraph or two exploring the potency as well as the limitations of this rigorous definition as follows. This is a one-page, one-definition assignment. You may hand-write your answer below. A word processor version of this page is provided if you wish to type your answer. In any case, the material on this page must appear at the top of your work. Some bullet points may not apply to this definition. Limit yourself to the materials of this course. In particular:

- State this definition with mathematical precision, as clearly as you can, using symbols and words as needed.
- Provide an informal, colloquial, friendly, but accurate statement of what this definition means to say.
- Include a sketch, diagram, or “idea picture” to illuminate this definition if useful.
- Speculate about what may have inspired the need for, or suggested the value or naturalness of this definition.
- Provide one or more non-trivial examples illustrating this definition.
- If it makes sense, provide one or more cautionary examples which meet some but not all the conditions of this definition.
- If it makes sense, provide formal or informal cautionary statements of what this definition does not say.
- Share any advice you have about reading or using this definition in practice, and warnings about common mis-uses.