

CSC165, Summer 2005, Assignment 2

first portion of hints

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1. $\forall x, y \in \mathbb{R}$ is equivalent to $\forall x \in \mathbb{R}, \forall y \in \mathbb{R}$. You should decide whether you believe each claim. If you believe it, write the outline of a proof and try to fill in the gaps. If you disbelieve it, negate it and prove that.
2. It is possible that part (a) helps in the solution of part (b).
3. This is mainly an exercise in careful reading. Draw pictures of the function x^2 , and consider each claim. If you believe a claim is false, negate it and prove that.
4. Decide whether it's true or false, then you should be able to write a structured proof of what you conclude.