Math 350' Homework

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due 3 Mar2017

Write a one page (ish) response to the following:

In class, we discussed the controversy surrounding the use of computer to provide mathematical proof. We talked about Appel and Haken's work, and the improvement upon that work by Robertson and Seymour. I quoted Seymour as saying the following:

It was difficult to believe it [Apple-Haken's proof]: you can't check it. First you need a computer. Second, non-computer part is awful: it contains hundreds of pages of notes. You can't understand. You are not quite sure that the theorem is true. Nobody checked the proof. This is a bit scary.

What do you think Seymour's quote means in the larger context of computerassisted or computer-performed proof? How much computer aid do you think a proof can rely upon and still be a valid and justified mathematical argument? Do you think opinions on this will continue to evolve in the future, and how?