rubric: How tall is Yao?

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If you want to improve the grade on your assignment you must redo the work correcting the difficulty and answer the two questions posed below. Students with scores below 8 can do the make-up; the maximum score for the repeated work will be 8.

The assignment was to analyze an incorrect argument that I presented. Two points were possible for each of 1a, 1b, 2a, 2b, 2c, and 2d. I decided that the 2d was not clearly enough formulated to be graded.

1. First we study the problem as stated.
   (a) Explain the flaw in the argument.
   (b) Demonstrate the flaw in the argument using the graph of an appropriate function.

2. Now we analyze some of the fine points of the presentation.
   (a) Explain the relationship between the equations in the argument presented above. If you use a technical word like ‘equivalent’, explain in the language of 9th graders what it means.
   (b) The author used the word ‘or’ three times in stating the problem. What meaning was intended for ‘or’ in this context. Is that a good word to use for high school students? What are some alternatives?
   (c) How do you justify each step in argument above. That is, why are all (well, almost all) of the equations ‘equivalent’.
   (d) In fact, where I wrote ‘$H$ be your height, the author wrote ‘$H = your height’’. Can you explain why I made this change?

Further questions:
1. Explain the difference between ‘equivalent’ and ‘implies’.
2. Make up another example of proving a false statement using elementary algebra and identify the error. Don’t make it just like this one; you might, for example, sneak in a division by zero.