

How tall is Yao

I scored this as two points for each of the six parts and most people got the key issues and indeed almost full marks. The big difficulty is one with extraneous roots. Second, the author of the article inappropriately used the word 'or' when he meant equivalent. The final 'thus' reverses an implication $H - A = Y - A$ implies $(H - A)^2 = (Y - A)^2$ but not conversely.

Note for next year: Problems 2a and 2c ask essentially the same thing and it is hard to interpret 2d.

To make up the assignment, correct the parts marked wrong and answer the following. You can correct only if you got below 10.

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.