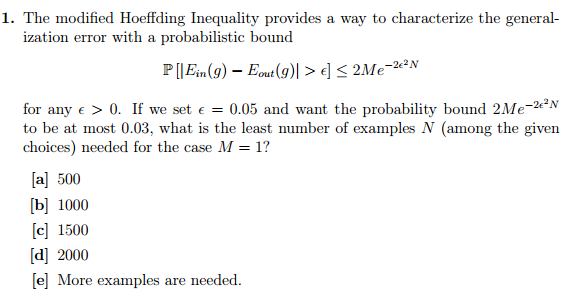
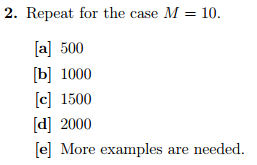
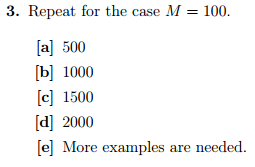
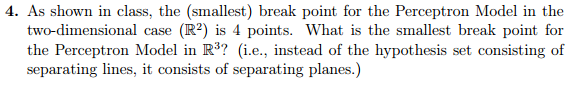
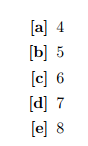
The Learning Problem HW3

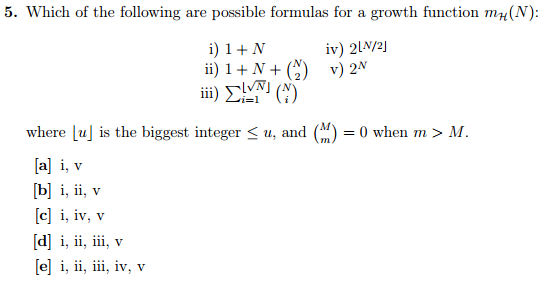




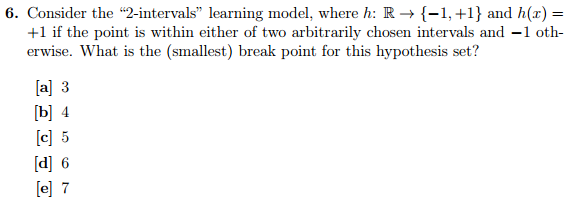


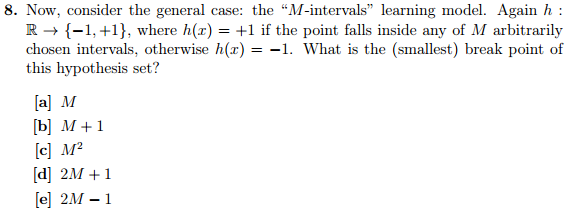
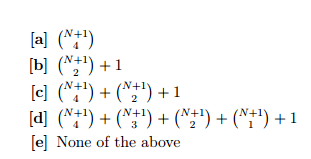


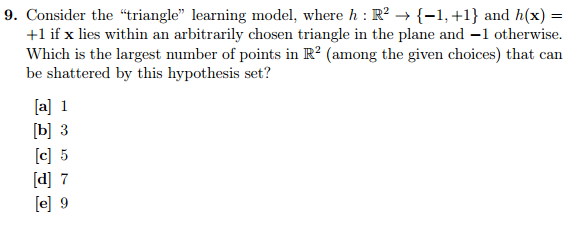




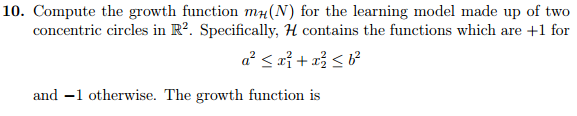
Correction: I didn’t fully understand the implications of the proof that if a growth function has a break point then it possesses a polynomial upper bound. As such, 3 and 4 are not possible growth functions. The answer is b.

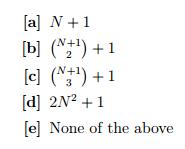






Correction: Did analysis after selecting points to *minimize* the breakpoint instead of *maximize it*. Grouping any arbitrary set of four point is possible with N=5, but not with N=7.





The worst case scenario here is all the points in a line that intersects the radius of the circles (at which point analyzing the number of dichotomies becomes the same as analyzing the number of dichotomies for the two-ray problem).

Grade:

Incorrect answers:

* #5 (I didn’t fully understand implications of proof that if there is a breakpoint, the growth function has a polynomial upper bound)
* #9 (accidentally selected N to minimize the break point instead of maximize it)

