

## COS 511: Theoretical Machine Learning

Hint on HW#4, problem 3a

Spring, 2019

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Suppose, as in the problem, that  $f$  is the majority vote of  $g_1, \dots, g_k$ . Start by showing that

$$\sum_{j=1}^k \mathbb{E}_{x \sim D} [f(x)g_j(x)] \geq 1.$$