"Hard" Predictions Can Slow Learning

• ideally, want weak classifier that says:

$$h(x) = \begin{cases} +1 & \text{if } x \text{ above } L \\ \text{"don't know"} & \text{else} \end{cases}$$

- problem: cannot express using "hard" predictions
- if must predict ± 1 below \emph{L} , will introduce many "bad" predictions
 - need to "clean up" on later rounds
- dramatically increases time to convergence