

# BILL AND NATHAN, RECORD LECTURE!!!!

BILL RECORD LECTURE!!!

# Lower Bounds on Approx for Set Cover

# Approximating Set Cover

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We will **sketch** a proof of a **weaker** lower bound on Set Cover.

# 2-Prover 1-Round Protocols

## Recall PCP

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3. One of the two cases above must happen.

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- (4)  $V$  makes his bit-queries to ONE Prover.

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1. It is similar to the **educational** example I gave of PCP
2. We will **use** this protocol later in our lower bound proof for SET COVER.

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(3) When  $V$  gets the answers he will then decide if he thinks  $\psi \in 3\text{SAT}$ .