

FORCING HINTS
FOR WEEKEND WARRIORS

- Problem 2. The first part is easy if you assume Problem 8 from Day 1.
- Problem 3. If S isn't disjoint from a large rectangle, find a subset of ω that is almost contained in uncountably many sections of S .
- Problem 5. Look at atoms.
- Problem 6. Assume $\text{cc}(\mathbb{P}) = \kappa$, and $\text{cf}(\kappa) < \kappa$. Follow the outline below:
- Let $\alpha(p) = \sup\{|A| : A \subseteq \mathbb{P}, (\forall q \in A) q \leq p, \text{ and } A \text{ is an antichain}\}$. Show $D = \{p \in \mathbb{P} : \alpha(p) < \kappa\}$ is dense.
 - Show $\sup\{\alpha(p) : p \in M\} = \kappa$ when $M \subseteq D$ is a maximal antichain.
 - Construct an antichain of size κ in \mathbb{P} .