

Individual Rationality and Preferences

PS 171B - Week 1

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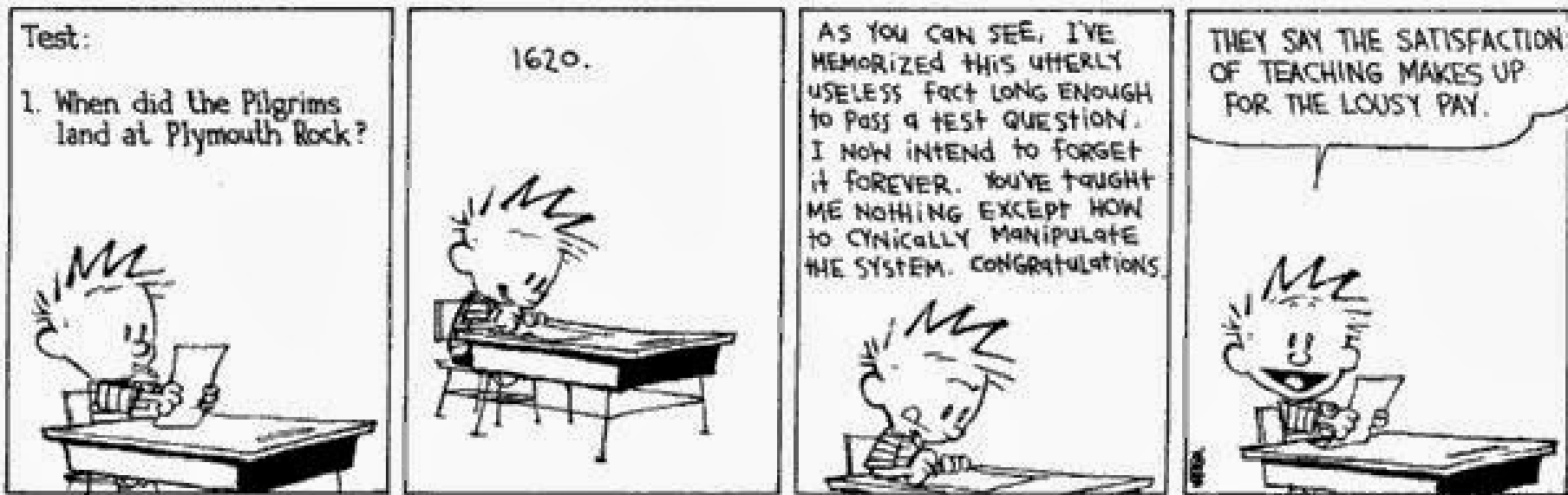
Introductions

- Name
- Year
- Hometown
- Interest in Class
 - Problem you want to solve?
 - Interesting application?
 - New way of thinking?

Administration

- Attend your assigned section
- Section participation is 10% of total grade
 - Can't participate if you don't attend
 - ONE unexcused absence permitted without penalty
- Office Hours:
 - Wednesday/Thursday 1-2 PM Bunche 4337
- Website: **github.com/deholliday/PS171B**

Purpose/Format of Section



Review of Preference Notation

Strict Preference:

$$x \succ y \text{ or } xPy$$

Weak Preference:

$$x \succeq y \text{ or } xRy$$

Indifference:

$$x \sim y \text{ or } xIy$$

Review of Rationality

Preference orderings must be **complete** and **transitive** in order to be rational.

- **Completeness:** $\forall x \in X$ and $\forall y \in X$, either xRy or yRx
- **Transitivity:** $\forall x \in X, \forall y \in X$, and $\forall z \in X$ if xRy and yRz then xRz

Usually we don't have issues with completeness. When might preferences be intransitive?

Practice Problem (Shepsle 2.4)

Two actors hold the following preferences over outcomes w , x , y , and z :

- Mr. i : xPw , xPy , zPx , yPz , wPy , and wPz
- Ms. j : xIy , xPz , xPw , yPz , yPw , and wIz

When presented with a choice over any subset of 3 or more outcomes...

- For which subsets can the actor identify their most-preferred choice(s)?
- Do any of the subsets contain a preference intransitivity among all outcomes in the subset?