

Given a fair division scenario, you should be able to:

- Be able to determine a player's fair share.
- Create a portion of a given value based on a player's preferences.
- Determine if a given division is proportional.
- Determine if a given division is envy-free.
- Implement a given fair division strategy:
 - Divider Chooser (Continuous for 2 players)
 - Lone Divider (Continuous for 3 players)
 - Last Diminisher (Continuous for 3 or more players)
 - Sealed Bids (Discrete with monetary compensation)
 - Method of Points (Discrete with same number of objects as players)
 - Adjusted Winner Procedure (Discrete/Mixed for 2 players with sharing) – you will be given the formula for q along with the definitions of all the variables in the formula
 - Continuous Envy-free Division for 3 players
- recognize if any of the above strategies are implemented incorrectly and identify where the procedure broke down.