

4. Major League Baseball uses what is known as a 5-3-1 system to vote for the Most Valuable Player (MVP) in each league. Each voter gets to vote for three different players they consider worthy of the award. Their first place candidate gets 5 points, their second place candidate gets 3 points, and their third place candidate gets 1 point. Points are then added up across all voters, and the player with the most total points wins the award. Suppose there are three voters—Neyer, Law, and Phillips—and five potential candidates for the award—Alex, David, Raffy, Manny, and Mario. The table below shows how each voter ranks the candidates. Raffy is embroiled in a substance abuse scandal. The “guilty” or “innocent” verdict will come out the day before voting, and a guilty verdict will ban him from MVP voting.

Rank	Neyer	Law	Phillips
Best	David	David	Raffy
Second Best	Alex	Alex	Alex
Third Best	Raffy	Raffy	Manny
Fourth Best	Manny	Manny	Mario
Fifth Best	Mario	Mario	David

- Who will win the MVP if Raffy is found innocent?
- Who will win the MVP if Raffy is found guilty?
- What problem with consistent aggregation does this illustrate?

6. Stratmann (1995) documented a condition of “logrolling” in Congress, in which members of Congress trade votes on one bill for votes on another. Is logrolling efficient, or should it be banned? Explain.

8. When local telephone companies wish to raise the rates they charge to phone customers, they must first argue their case at a public hearing before a regulatory body. How does the free rider problem explain why telephone companies are usually successful in getting permission to raise their rates?

11. Alfie, Bill, and Coco each value police protection differently. Alfie’s demand for the public good is $Q = 55 - 5P$, Bill’s demand is $Q = 80 - 4P$, and Coco’s demand is $Q = 100 - 10P$. If the marginal cost of providing police protection is \$13.5, what is the socially optimal level of police provision? Under Lindahl pricing, what share of the tax burden would each of the three people pay?

12. Carrboro has three equal-size groups of people: (1) Type A people consistently prefer more police protection to less; (2) Type B people prefer high levels of police protection to low levels and they prefer low levels to medium levels; (3) Type C people most prefer medium levels to low levels, which they in turn prefer by a modest amount to high levels.

- Which types of people have single peaked preferences? Which have multi-peaked preferences?
- Will majority voting generate consistent outcomes in this case? Why or why not?