Suppose four teams play six games with the following results:

- Team 1 beats Team 2 by 7 points.
- Team 1 beats Team 3 by −8 points (loses by 8).
- Team 2 beats Team 3 by 0 points (ties).
- Team 2 beats Team 3 by 15 points.
- Team 2 beats Team 4 by 5 points.
- Team 3 beats Team 4 by −1 points (loses by 1).

1. Before doing any math make an educated guess as to which team is best, second best, third best and fourth best.

2. Write down the corresponding Massey matrix equation $M\hat{r} = \bar{q}$. Be careful, it’s easy to mess this up!

3. Solve to find the team rankings. Was your guess in (a) right?

4. Even though Team 1 did not play Team 4, if they were to play what result might you expect?

5. Suppose the team that ranked lowest gets to play one more game against the team that ranked highest. By what amount must they win in order to become the highest-ranked team? Assume scores must be integers.