

## Borda Count

## Math 111 - Workshop

1. Consider the election below.

Candidate	Number of Voters				
	14	10	8	4	1
Alfred Pennyworth	1st	4th	4th	4th	4th
Bruce Wayne	2nd	2nd	3rd	1st	3rd
Selina Kyle	3rd	1st	2nd	3rd	1st
Dick Grayson	4th	3rd	1st	2nd	2nd

- (a) How many points would each candidate get using Borda count? Which candidate is the Borda count winner?
- (b) How many points would the other candidates get if Dick Grayson dropped out of the election? Explain why this means that Dick Grayson is a spoiler candidate.
2. Members of an outdoor adventure club have voted on their next activity. The results are shown in the preference schedule below.

	Percentage of voters			
	40%	25%	20%	15%
Climbing	2nd	2nd	1st	3rd
Kayaking	1st	3rd	3rd	2nd
Paintball	4th	1st	2nd	4th
Sailing	3rd	4th	4th	1st

- (a) Use Borda count to find out how many points each activity will receive if there are exactly 100 voters.
- (b) Explain why the winner of the election does not depend on how many voters there are, just on the percentages in the table above.