

Math 129
Voting Methods

Names:

Our class will take a vote to decide what will be the last topic for this semester. The options available are as follows:

- A** – Fractals
- B** – Consumer Mathematics
- C** – Mathematics in Art
- D** – Geometry and Topology

- a) Use the ballot provided by the instructor to rank these topics in order of preference. Be sure to rank all four topics.

- b) Use the ballots from the whole class to build a **Preference Table**. Explain how to check that all ballots were included in your table.

Preference	Number of Ballots									

- c) What topic is selected using the **Plurality Method**? Explain.

- d) Use the **Borda Counting Method** to decide what topic is selected. Use a table to find how many points each choice earned. **Show all you calculations.**

e) Use the **Plurality-with elimination Method** and the Preference Table from (b) to select the topic. Assume that voters will not change the order of their preference. (Do not use more than one round of voting). **Show all the tables that support your conclusion.**

f) Use the **Pairwise Comparison Method** (Head to Head comparison) to decide what topic wins. **Show all your work**

g) Based on all this information, what topic should be selected? Explain.

