

## MA 125 - Reading Assignment 2 - Section 1.3 - Spring 2008

Uncle Sam wants \_\_\_\_\_

1. A plurality election between any two candidates in an election is called a \_\_\_\_\_ - \_\_\_\_\_.
2. Follow Example 1. For the three candidates below, determine the winners of all possible elections held between two candidates. (There are three such elections.)

	Number of Voters			
	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>
Candidate 1	1	2	1	3
Candidate 2	2	3	3	1
Candidate 3	3	1	2	2

3. A candidate who is the winner of all possible elections between himself/herself and every other candidate is called the \_\_\_\_\_ winner.
4. A candidate who wins or ties all possible elections between himself/herself and every other candidate is called the \_\_\_\_\_ winner.
5. For the elections held in Question #2 of this sheet, was there a winner of the type described in Question #3 of this sheet? \_\_\_\_\_
6. The process of analyzing real-life problems by deducing or hypothesizing a mathematical structure is called \_\_\_\_\_.
7. **True or False:** A winner of the type described in Question #3 of this sheet must also be the winner plurality election of all the candidates.
8. Give an example of a situation in which preference rankings are often single-peaked.
9. Give an example of a situation in which preference rankings are probably not single-peaked.