WS5.05

Fair Share

	1	2	3	4	5	6	7	8	9	Ranking	Median	Moves	Mean	
Α	6	5	5	4	5	5	6	5	4					
В	1	10	10	1	1	10	1	10	1					
С	2	4	8	3	4	6	6	7	5					
D	4	4	7	4	4	5	6	7	4					
Ε	1	4	8	4	4	6	6	8	4					
F	8	1	7	7	4	1	3	7	7					

WS5.06 The Median

- 1. Do you expect that the median stack size for the 9 stacks will always be the same for any allocation? Why or why not?
- 2. Put your 45 blocks into this allocation: 2, 4, 8, 3, 4, 6, 6, 7, 5 Why is the median *not* the fifth stack in the allocation?
- 3. How would you go about finding the median stack size for this allocation?
- 4. Create a new allocation of the 45 cubes into 9 stacks so that the median is equal to 5. (Do not use the allocation with 5 cubes in each stack.)
- 5. Create a new allocation of the 45 cubes into 9 stacks so that the median is *not* equal to 5.
- 6. What is the mean for your new allocation?
- 7. Find a third allocation that has a median different from the ones in the previous two problems.
- 8. What is the smallest possible value for the median?
- **9.** What is the largest possible value for the median? (Remember that there must be 9 stacks for the 45 cubes, and each stack must contain at least 1 cube).