

First Come - First Serve Allocation Game

Name: _____ Date: _____

Tomorrow, at the local library, the first ten people in line will receive \$100. This will occur at 9 a.m. when the library opens. Your time is worth \$8 an hour, starting when you get in line at the library. You have no idea how many people are in line ahead of you, therefore you cannot know in advance whether or not the time you start waiting will be early enough to receive the \$100. The only way for you to know is by waiting until 9 a.m.

On a small piece of paper, write down what time you will start waiting in line. You may pick a time in 15 minutes increments (such as, you may choose to start waiting in line at 7:15 a.m.). Then, pass the slip of paper down, where two appointed students will collect them and turn them in to the teacher.

Now, subtract the time at which the library opens – 9 a.m. – from the time you decided to start waiting.

Time library opens:	
Time you started waiting:	
Total amount of time waited:	

After you have finished this, your teacher will inform the class which ten students won the \$100. If there is a tie for the 10th winning place, all students who arrived at the same time will receive \$100. If you were one of the ten winners, your score is \$100 minus (-) \$8 times (x) the hours you waited in line. If you are one of the students who did not receive \$100, you should receive a score of minus (-) \$8 times (x) the hours you waited in line. Perform your calculations in the provided box.

Example: If you arrived at 5 a.m., and were not among the first ten that were waiting to enter the library, your score would be: $-\$8 \times 4 = -\32 .

Calculations