This quiz is worth 25 points. You should clearly show all of your work and justify your answers where appropriate.

1. 15 points Delaware has 3 counties, whose populations are shown below, and an Assembly with 41 seats.

County	Population	Standard Quota			Hamilton Apport.
Kent	110,993				
New Castle	441,946				
Sussex	113,229				
Total	666,168				

(a) What is the standard divisor?

(b) Apportion the 41 seats using the Hamilton Method.

(c) Find the relative unfairness between the Hamilton Apportionment of Sussex County and Kent County. Which county does the apportionment favor?

2. 10 points A bank with six branches wants to set up a total of 11 ATM machines at the branches according to the number of customers per day at each branch, which are shown in the table below. Using a divisor between 111.015 and 118.08, apportion the ATMs using the Huntington-Hill Method. **Clearly indicate the divisor that you use.**

Branch	Customers	Quota for D		H-H Apport.
Crescent Hill	167			
Downtown	68			
Highlands	100			
Jeffersontown	157			
Middletown	354			
Portland	298			
Total	1144			