

Homework Assignment No. 7

Show all of your work on scratch paper, label your answers, and you MAY use a calculator.
This assignment is due Monday, April 4th.

Problem 1 Round the following to integer percentages using the specified method:

$$92.15\% + 1.59\% + 1.58\% + 1.57\% + 1.56\% + 1.55\% = 100\%$$

a Using the Hamilton method

b Using the Jefferson method

c Using the Webster method

d Using the Hill-Huntington method

Problem 2 In problem 1, which of the apportionments, if any, violated the quota condition?

Problem 3 A country has a 20 seat parliament. Seats are apportioned to parties by the d'Hondt method. The following table displays the results of a recent election. Find the apportionment.

Demopublicans	44,856
Repocrats	34,944
Greenocrats	20,004
Greenicans	19,002
Independents	9,804

Problem 4

a What is the relationship between the d'Hondt method and the Jefferson method?

b What is the condition for an apportionment to be equitable with respect to representative share?

Problem 5 Determine the check digit for a money order with identification number 3953981640.

Problem 6 Determine the value of X so that 7X345417803 is a valid money order identification number.