## Purposes of the Assignment

- Writing to learn mathematics.
- Gain experience in communicating mathematics.
- Demonstrate knowledge of the apportionment methods we have studied in class.
- Demonstrate the ability to use the apportionment methods we have studied in class.

Grading of the Assignment
In grading this assignment, three aspects of your work will be emphasized.

- Mathematics: You will need to show that you understand the mathematics involved in the assignment.
- Context: You need to clearly explain the situation you are using for this assignment. You will clearly have to explain the apportionment methods used.
- Conventions: Correct spelling, grammar, and mathematical notation are expected. You are encouraged to have a friend read a draft of the paper.

A tentative evaluation form is included at the end of this assignment.

## The Assignment

Following is the population data for each state for the 1800 census.

| State | Population |
| :--- | :---: |
| Virginia | 747,362 |
| Pennsylvania | 601,863 |
| New York | 577,805 |
| Massachusetts | 574,564 |
| North Carolina | 424,785 |
| Maryland | 306,610 |
| South Carolina | 287,131 |
| Connecticut | 250,622 |


| State | Population |
| :--- | :---: |
| New Jersey | 206,181 |
| Kentucky | 204,822 |
| New Hampshire | 183,855 |
| Vermont | 154,465 |
| Georgia | 138,855 |
| Tennessee | 100,169 |
| Rhode Island | 69,970 |
| Delaware | 61,812 |

The size of the United States House of Representatives in 1800 was 141.
Your task is to apportion the 141 seats for the House of Representatives using Hamilton's Method, Jefferson's Method, Webster's Method, and the Huntington-Hill Method.

Your report must also include the following:

- The standard quota for each state.
- A complete description of the procedure used for each of the apportionment methods.
- The computations used to determine the apportionment of at least two different states using Hamilton's method.
- The computations used to determine the apportionment of at least two different states using Jefferson's method.
- The computations used to determine the apportionment of at least two different states using Webster's method.
- The computations used to determine the apportionment of at least two different states using the Huntington-Hill method.

Due: Thursday April 10, 2003
Possible Evaluation Form

## Ideas and Content

- Overall situation described correctly
- Correctly tells the "story" of the election.
- Complete and correct mathematical details
- Equations and mathematical constructions correct


## Style and Organization

- Unique/individual introduction that makes you want to read the paper
- Interesting presentation
- Addresses all parts of the assignment
- Includes enough details and examples


## Conventions

- Free of grammatical errors
- Free of spelling and punctuation mistakes

Weak
Strong
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\square$
$\square$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

