Webster's Method
Lecture 23
Section 4.4

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Outline

Webster's Method

Definition (Webster's Method)

By Webster's method, we start with the *rounded* quotas. If the total is too small, then we use a smaller modified divisor. If the total is too large, then we use a larger modified divisor. The process continues until the rounded modified quotas add up to M.

Example

Example (Example)

- Apply Jefferson's method to the three states *A*, *B*, and *C*, with populations 3 million, 6 million, and 7 million and 50 seats to be apportioned.
- We found SD $= 320000$ and $q_1 = 9.375$, $q_2 = 18.75$, and $q_3 = 21.875$.
- Apply Webster's method.

Example

- The populations of CA, TX, AK, and WY, in tens of thousands, are $3725, 2515, 71$, and 56 people, respectively.
- Use Webster's method to apportion 91 seats.

Outline

Example (Comparisons)

- The populations of CA, MN, AL, LA, and OR are

State	Pop
CA	37,253,956
MN	5,303,925
AL	4,779,726
LA	4,533,372
OR	3,831,074

- Apportion 28 seats to these states using Hamilton's, Jefferson's, Adams's, and Webster's methods.
- Compare the results.
- Which states are favored by the different methods?

Outline

Assignment

Assignment

- Chapter 4: Exercises 35, 36, 37, 38, 39, 40.