Problem on Apportionment Methods

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January 13, 2004

A university consists of four college. The number of students in College A is 1,235; the number in College B is 3,245; the number in College C is 20,730; and the number in College D is 24,790. Thus the total number of students is 50,000. There are 100 seats in the student senate.

- 1. Find the standard divisor.
- 2. Find the quota for each college.
- 3. Use your answer to part (b) to apportion the seats using Hamilton's method.
- 4. Apportion the seats using Jefferson's method. Do this using critical divisors.
- 5. Apportion the seats using Webster's method. Do this using critical divisors.
- 6. We said that Jefferson's method favors large states, and Webster's method favors large states when seats must be added. (It favors small states when seats must be subtracted.) Do you think this problem illustrates this?