1. Know the definitions of standard divisor and standard quota, and be able to interpret their meaning in a particular apportionment problem.

2. From given individual state populations (or similar quantities to which the apportionment is to be proportional) and a given house size (or number of things to be apportioned), be able to use the four methods below to apportion the representative body (or collection of things to be apportioned). In the last three methods, be able to describe the rounding method used and give a divisor that will yield the apportionment after rounding. (The divisor may be found using "guess and adjust" or using algebra.)
   a) Hamilton  
   b) Jefferson  
   c) Webster  
   d) Huntington-Hill

3. Know which method is biased toward large states (Jefferson).

4. Be able to state the Quota Rule, and know which apportionment method(s) always produce apportionments that satisfy the Quota Property (Hamilton) and which do not (the divisor Methods: Jefferson, Webster, and Huntington-Hill).

5. Be able to state and recognize the two paradoxes we studied (Alabama and Population). If a situation is an example of one of these paradoxes, be able to explain why. Know the apportionment method we studied in which these can occur (Hamilton), and the methods we studied in which they cannot occur (the divisor Methods: Jefferson, Webster, and Huntington-Hill).

6. Be able to state and explain Balinski and Young’s Theorem (p. 294: No apportionment method always produces apportionments that both satisfy the Quota Property and avoid the Population Paradox).

7. Given the populations and apportionments of a collection of states, be able to calculate their average constituencies. Be able to calculate the absolute and relative unfairness between the apportionments of two states. Know which apportionment method always produces the apportionment with the smallest relative unfairness between any two states (Huntington-Hill), and be able to verify an example of this.

8. Know the material in the Chapter 4 Part 2 Overview on pages 306-7 of the text. Be able to do the review exercises 7 – 16 on page 308-9 of the text. (Answers on p. 359-362.) Be able to fill in the blanks in the historical questions on page 310. (Also on next page.)
Fill in the blanks below using the phrases listed at the bottom of the page. These give some of the highlights of the history of the apportionment methods considered and/or used by the U. S. Congress to apportion the House of Representatives. (Some phrases may need to be used more than once, some not at all; the blank by 1911 requires a number, not a phrase)

1792 Congress proposes that __________________________________________ be used, but President Washington vetoes this proposal. In its place, __________________________ is adopted.

1842 Congress abandons ________________________________________, primarily because ____________________________________________________, and adopts ____________________________________________________.

1852 Congress adopts ________________________________.

1880 ____________________________________________ surfaces as a serious flaw in ____________________________________________________.

1902 ____________________________________________ resurfaces as the same serious flaw in ____________________________________________________,

and ____________________________________________ is readopted.

1911 The size of the House of Representatives is fixed at its current size of ________________.

1942 The method currently used, ________________________________, is adopted. This method has the advantage that____________________________________________

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**Phrases**

- The Hamilton Method: It favors small states
- The Huntington-Hill Method: It favors large states
- The Jefferson Method: It violates the quota rule
- The Webster Method: It produces paradoxes
- It minimizes the absolute unfairness: The Alabama Paradox
- It minimizes the relative unfairness: The Population Paradox