# Systematically Evaluating Apportionment Methods

#### Ideal method should

- Stay within the quota
- Avoid the population paradox
- Avoid the Alabama paradox
- Avoid the new states paradox
- Avoid systematic bias toward large or small states

## Recap

#### **Paradoxes**

- ► The divisor methods are the *only* methods that avoid the Population paradox
- ▶ All divisor methods avoid the Alabama paradox
- All divisor methods avoid the New States paradox

## Staying within the quota

► There is no method that avoids the population paradox and stays within the quota.

### Claim

Webster's Method is the only unbiased divisor method

# Apportionment in 1920s

In 1920, argument about Hill's method vs. Webster's method

### 1929 Law

The president will send to the Congress the results of the census and the apportionment of the 435 members of the House based on:

- ▶ The method used in the preceding apportionment
- Webster's method
- ► Hill's method

If Congress does not apportion itself, then apportionment is based on the method last used.

## **Current Situation**

- ▶ In 1930, Hill's and Webster's method agreed
- ▶ In 1940, Hill's method gave an extra seat to the Democrats
- ► Hill's used since