Quiz 5A, Math of Democracy

Fall 2018, Dr. Adam Graham-Squire

Name: _____

1. The following country needs to apportion 43 seats to its House of Representatives.

State	Population
A	588
B	142
C	134
D	64
E	218

(a) Use Hamilton's method (round down, take largest fractional parts) to apportion the 43 seats. Explain/show your work.

(b) Use Webster's method (conventional rounding) to apportion the 43 seats. Explain/show your work.

2. Consider the 4 apportionment methods: Hamilton (largest fractional part), Jefferson (round down), Adams (round up), Webster (conventional rounding). This question is about whether the method favors certain kinds of states.

(a) Name a method that consistently favors *smaller* states, and explain why. It is fine to reference an example, but for full points you should explain why *in general*, that method tends to favor smaller states.

(b) Name a method that consistently favors neither smaller *or* larger states, and explain why. It is fine to reference an example, but for full points you should explain why *in general*, the method favors no one.