

MA 110 Quiz 6 **ANSWERS**

The legislature of a country has 160 seats to be apportioned among four states A, B, C, and D, in proportion to their populations. The table below shows the populations of the states. Complete the table by filling in all **unshaded** blanks in order to produce each of the apportionments indicated: Webster's, Jefferson's, and Adams'. [Hints: You need to find the total population in order to find the standard divisor. You may have to do some trial and error scratch work on the reverse in order to determine the appropriate modified divisor and modified quotas. Be sure to transfer your work to be graded to this page.]

State	A	B	C	D	Total	Points
Population	11,591	7,395	3,479	1,535	24,000	1
Standard Divisor	150					
Standard Quotas	77.273	49.300	23.193	10.233	160.00	
Modified Divisor	148	148.0 to 148.6				2
Modified Quota	78.318	49.966	23.507	10.372		
Jefferson App't	78	49	23	10	160	
Modified Divisor	152	151.3 to 152.5				2
Modified Quota	76.257	48.651	22.888	10.099		
Adams App't	77	49	23	11	160	
Modified Divisor	149.5	149.40 to 149.56				2
Modified Quota	77.532	49.465	23.271	10.268		
Webster App't	78	49	23	10	160	

Did any of the apportionments above violate the Quota Rule? If so, indicate which apportionment, which state, and whether the upper quota or the lower quota was violated.

No violations of the quota rule.

[1]

Print Code: _____

State	A	B	C	D	Total
Population	11,591	7,395	3,479	1,535	
Standard Divisor					
Standard Quotas					
Modified Divisor					
Modified Quota					
? App't					
Modified Divisor					
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