

Instructions: Show all work. Answer each question as completely as possible. Use exact values. For counting problems you may use scientific notation (with three significant figures) for any numbers larger than a million.

1. Apportion 175 seats using Webster's Method by completing the table below.

State	Population	Standard Quota	Round	Final Apportionment
Samia	9009	50.68	51	51
Ternium	5912	33.26	33	33
Ullias	6954	39.12	39	39
Vortiox	4362	24.54	25	25
Woosiel	4871	27.40	27	27
Total	31,108		175	175
Standard Divisor	177.76			

no modified divisor needed

2. Apportion 200 seats using Huntington-Hill's Method by completing the table below.

State	Population	Standard Quota	LQ	UQ	$\sqrt{LQ \cdot UQ}$	Final Apportionment
Samia	9009	57.92	57	58	57.4978	58
Ternium	5912	38.009	38	39	38.4967	38
Ullias	6954	44.708	44	45	44.497	45
Vortiox	4362	28.044	28	29	28.4956	28
Woosiel	4871	31.316	31	32	31.496	31
Total	31,108		198			200
Standard Divisor	155.54					