

Instructions: Show all work. Use exact answers unless otherwise directed to round.

1. A college have 6 branch locations with student populations (by credit hours) shown in the table. The college needs to distribute 35 math teachers across the branches. Use Webster's method to find a fair apportionment.

Campus	Population	Standard Quota	Lower Quota	Upper Quota	Initial Apportionment	Modified Divisor	Final Apportionment
Clearcourt	28,497	8.33	8	9	8		8
Ironston	15,482	4.53	4	5	5		5
Mallowpond	25,111	7.34	7	8	7	no need	7
Brighthurst	22,172	6.48	6	7	6	no need	6
Glassmont	12,141	3.55	3	4	4		4
Shoremill	16,338	4.78	4	5	5		5
Standard Divisor = 3421					35		35

Total = 111741

2. A college have 6 branch locations with student populations (by credit hours) shown in the table. The college needs to distribute 35 math teachers across the branches. Use the Huntington-Hill Method to find a fair apportionment.

Campus	Population	Standard Quota	Lower Quota	Upper Quota	Initial Apportionment	Modified Divisor	Final Apportionment
Clearcourt	28,497	8.33	8	9	8		8
Ironston	15,482	4.53	4	5	5		5
Mallowpond	25,111	7.34	7	8	7		7
Brighthurst	22,172	6.48	6	7	6	no need	6
Glassmont	12,141	3.55	3	4	4		4
Shoremill	16,338	4.78	4	5	5		5
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