

Counting votes under a PR-STV electoral system using a Weighted Inclusive Gregory system for transfers (3 members to be elected from the electoral district, 5 candidates, 5000 valid ballots)

The quota for election is total valid votes divided by 1 + number of members to be elected, and then 1 is added to the result =1251 votes	1st count (1st preference votes) Freda is elected (surplus for transfer)	Freda has a surplus of 249 votes. All her 1500 ballots are recounted to assign an equivalent number of votes to the 2nd preferences shown on the ballots. 800 ballots have 2nd preferences for Bill, and 700 for Saul. These ballots are turned into an appropriate number of votes (the 249 surplus) when multiplied by the transfer value (TV; see below)	2nd count no-one is elected (elimination required)	As the candidate with the fewest votes, Bill is eliminated. Bill's votes have come from 2 parcels of ballots: 750 1st preference ballots for Bill; and 800 2nd preference ballots from Freda's surplus All Bill's 750 1st preference ballots have a 2nd preference for Saul and are transferred at full value. The 800 ballots from Freda all show a 3rd preference for Saul and are transferred at the same transfer value as Bill received them.	3rd count Saul is elected (surplus for transfer)	Saul has a surplus of 548 votes. All his ballots are recounted and an equivalent number of votes is assigned to the next available preferences shown on the ballots. Saul's votes have come from four parcels of ballots: 800 first preference ballots for Saul 700 2nd preference ballots from Freda's surplus 750 from Bill's 2nd preferences 800 from Freda's 3rd preferences through Bill Each parcel is transferred at the same TV as they were received by Saul. Except for the 700 ballots from Freda (which favour Peter) all the other parcels of ballots give their next preference to Amy	Final count Amy is elected (Amy has the most votes of the remaining candidates)											
	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	<i>ballots</i>	<i>votes</i>	
Apple Party																		
Freda	1,500	-1,500	-249	1,251					1,251									1,251
Bill	750	800	133	883	-750	-750	-800	-133										
Pear Party																		
Amy	890			890					890	800	244	700		750	228	800	40	1,403
Peter	1,060			1,060					1,060				35					1,095
Independent																		
Saul	800	700	116	916	750	750	800	133	1,799	-800	-244	-700	-35	-750	-228	-800		1,251

Transfer value (TV) Freda's transfers = 249/1500 = 0.1660

Transfer value (TV) Bill's eliminated 1st preference votes = 1.0000

Transfer value (TV) Bill's eliminated 2nd preference votes from Freda (surplus) = 249/1500 = 0.1660

Transfer value (TV) Saul's transfers for 800 1st preference ballots = 548/1799 = 0.3046

Transfer value (TV) Saul's transfers for 700 2nd preference ballots from Freda (surplus) = (548/1799) x (249/1500) = 0.0505

Transfer value (TV) Saul's transfers for 750 2nd preference ballots from Bill (elimination) = (548/1799) = 0.3046

Transfer value (TV) Saul's transfers for 800 3rd preference ballots from Freda (surplus through Bill's elimination) = (548/1799) x (249/1500) = 0.0505