Empirical Formula Determination (in 4 or 5 easy steps)

1. If given percent composition, take each percentage in grams (as if using a 100-gram sample).
2. Convert each element from grams à moles
3. Divide each element by the smallest number.
4. If the numbers are reasonably whole numbers, round each and use as subscripts. Otherwise, go to then next step.
5. Determine which decimal ending is close to that in the table below and multiply each by the common denominator.

Principle of Common Denominator		
decimal ending	(approximate) fraction	Multiply **each** by denominator:
0.25	1/4	4
0.33	1/3	3
0.50	1/2	2
0.67	2/3	3
0.75	3/4	4