Explanation of the Maths Trick (see LTM 3, p.46)

Clifford Smith

Let the telephone number in general be xyzpqrs
Take xyz and multiply by 80

We must expand xyz to	$100x + 10y + z$
Then multiply by 80:	$80(100x + 10y + z) = 8000x + 800y + 80z$
Add 1:	$8000x + 800y + 80z + 1$
Multiply by 250:	$2000000x + 200000y + 20000z + 250$
Add the last four digits twice:	$2000000x + 200000y + 20000z + 250 + 2pqrs$
Subtract 250 and divide by 2:	$1000000x + 100000y + 10000z + pqrs$
Expand pqrs:	$1000000x + 100000y + 10000z + 1000p + 100q + 10r + s$
Contract the above:	xyzpqrs i.e. your telephone number