	Time taken per multiplication in nano seconds					
Num of digits	ITERATIVE ADDITION	STANDARD MULTIPLICATION	RECURSIVE MULTIPLICATION	RECURSIVE FAST MULTIPLICATION		
2	6288	1186.75	2866.5	2230.25		
4	749641.6	661.25	3079.25	4799.75		
8	9.35983622E+09	1867	11540	16825.5		
16	Too slow	53634	63999.75	99680.75		
32	S	95399	234591.5	269746		
64	S	229408.3	953614.5	1088675		
128	S	566835.5	4334794.5	1789519		
256	S	2093820	13684645	4917855		
512	S	5777422	47805778.5	10711352		
1024	S	13138167	185468377.5	34895067		
2048	S	47952933	644015494.5	93063128		
4096	S	1.7E+08	2376475604	2.9E+08		

b) Time taken for 8192 digits:

iterative addition :

Standard multiplication: 637742912 ns

Recursive multiplication: 9108208422 ns

Recursive fast multiplication : 993426177 ns

d) Formulas:

iterative addition : $t= 1E+06n^2 - 6E+06n + 8E+06$

Standard multiplication: $t = 8.9023n^2 + 4942n - 10841$

Recursive multiplication: $t = 129.58n^2 + 50769n - 5E+06$

Recursive fast multiplication : $t = 12.267n^2 + 20895n - 970098$

e) after what point does recursive fast multiplication becomes faster than :

Recursive multiplication: after 100 digits

Standard multiplication : It never is

Iterative addition: it always is