

Algorithm	nb. of multiplications	nb. of additions
Schoolbook	$n^2$	$(n-1)^2$
Karatsuba	$n^{\log 3}$	$7n^{\log 3} - 7n + 2$
DFT-based <sup>(*)</sup>	$3n \log 2n - 4n + 6$	$9n \log 2n - 12n + 12$

<sup>(\*)</sup> using

*real-valued FFT of with 3/3 strategy for complex multiplication*