

Length- N Sequence	N -point DFT
$x[n]$	$X[k] = \text{Re}\{X[k]\} + j \text{Im}\{X[k]\}$
$x_{\text{pe}}[n]$	$\text{Re}\{X[k]\}$
$x_{\text{po}}[n]$	$j \text{Im}\{X[k]\}$
Symmetry relations	$X[k] = X^*[\langle -k \rangle_N]$
	$\text{Re } X[k] = \text{Re } X[\langle -k \rangle_N]$
	$\text{Im } X[k] = -\text{Im } X[\langle -k \rangle_N]$
	$ X[k] = X[\langle -k \rangle_N] $
	$\arg X[k] = -\arg X[\langle -k \rangle_N]$

Note: $x_{\text{pe}}[n]$ and $x_{\text{po}}[n]$ are the periodic even and periodic odd parts of $x[n]$, respectively.