.....remember the complex exponential $e^{j\omega t}$ and you should be able to build all the formulas...

	Analysis	Synthesis	Time	Frequency
FS	$c_k = \frac{1}{T}\int_T x(t).e^{-jkt\frac{2\pi}{T}}.dt$	$x(t) = \sum_{k=-\infty}^{\infty} c_k e^{jkt\frac{2\pi}{T}}$	Continuous Periodic	Non-periodic Discrete
FT	$X(\omega) = \int_{-\infty}^{\infty} x(t).e^{-j\omega t}.dt$	$x(t) = \frac{1}{2\pi}\int_{-\infty}^{\infty} X(\omega)e^{j\omega t}d\omega$	Continuous Non-periodic	Non-periodic Continuous
DTFT	$X(\Omega) = \sum_{n=-\infty}^{\infty} x[n].e^{-j\Omega n}$	$x[n] = \frac{1}{2\pi}\int_{2\pi} X[\Omega]e^{j\Omega n}d\Omega$	Discrete Non-periodic	Periodic Continuous
DFT	$X[k] = \sum_{n=0}^{N-1} x[n]e^{-jkn\frac{2\pi}{N}}$	$x[n] = \frac{1}{N}\sum_{k=0}^{N-1} X[k]e^{jkn\frac{2\pi}{N}}$	Discrete Periodic or finite duration	Periodic Discrete

There is one mistake in the above transform formulas. Can you spot it?