

Tablo 4.1 Bazı fonksiyonların Z dönüşümleri

f_n	$Z(f_n) = F(z)$
1	$z/z-1$
a^n	$z/z-a$
n	$z/(z-1)^2$
n^2	$z(z+1)/(z-1)^3$
$n^{(m)}$	$m!z/(z-1)^{m+1}$
$\sin(an)$	$\frac{z \sin a}{z^2 - 2z \cos a + 1}$
$\cos(an)$	$\frac{z^2 - z \cos a}{z^2 - 2z \cos a + 1}$
$\sinh(an)$	$\frac{z \sinh a}{z^2 - 2z \cosh a + 1}$
$\cosh(an)$	$\frac{z^2 - z \cosh a}{z^2 - 2z \cosh a + 1}$
$\delta_n(m) = \begin{cases} 1, & n = m \\ 0, & n \neq m \end{cases}$	$\frac{1}{z^m}$
$u_n(m) = \begin{cases} 0, & 0 \leq n \leq m-1 \\ 1, & m \leq n \end{cases}$	$\frac{z^{1-m}}{z-1}$
nf_n	$-zF'(z)$
$\sum_{i=0}^n f_i$	$\frac{z}{z-1}F(z)$
$a^n f_n$	$F\left(\frac{z}{a}\right)$
$a \in \mathbb{Z}^+ \begin{pmatrix} n \\ a \end{pmatrix}$	$\frac{z}{(z-1)^{a+1}} \quad z > 1$
$\begin{pmatrix} a \\ n \end{pmatrix}$	$\frac{(z+1)^a}{z^a} \quad z > 1$