

Problem 9.1

Find z - transform of the signals:

(a) $x_1[n] = 7\delta[n]$

after z-transform : $X_1(z) = 7$

(b) $x_2[n] = \delta[n - 1]$

after z-transform : $X_2(z) = z^{-1}$

(c) $x_3[n] = 5\delta[n - 4]$

after z-transform : $X_3(z) = 5z^{-4}$

(d) $x_2[n] = 7\delta[n] - \delta[n - 1] + 5\delta[n - 4]$

after z-transform : $X_4(z) = 7 + z^{-1} + 5z^{-4}$