

Consider the following set of sequences defined over $-3 \leq n \leq 3$ and zero elsewhere (i.e. they are finite-length):

$$\begin{aligned} x[n] &= [\quad 3 \quad -2 \quad -1 \quad -1 \quad 4 \quad 5 \quad 2 \quad] \\ y[n] &= [\quad 0 \quad 7 \quad 1 \quad -3 \quad 4 \quad 9 \quad -2 \quad] \\ z[n] &= [\quad -5 \quad 4 \quad 3 \quad 6 \quad -5 \quad 0 \quad 1 \quad] \end{aligned}$$

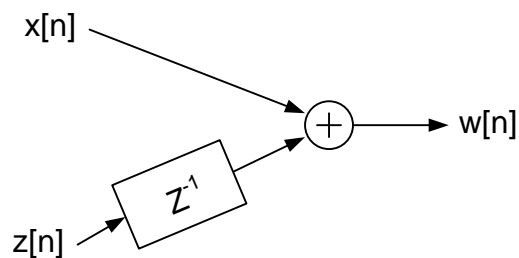
↑

Write each of your answers as a sequence, e.g. $[\quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad]$

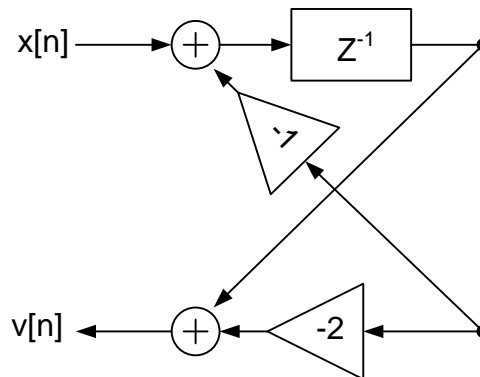
↑

P1 Find $r[n] = x[n] - 2y[n]$ for $-3 \leq n \leq 3$

P2 Find $w[n]$ for $-3 \leq n \leq 3$



P3 Find $v[n]$ for $-3 \leq n \leq 0$



P4 Find $s[n]$ for $-3 \leq n \leq 3$

