1 1

Exercício 4

RA = 11 2017 21076 $r_1 = 1$ $r_2 = 0$ $r_3 = 7$ $r_4 = 6$

(c) W_{j-1} $h_\psi(n) = \{-1/\sqrt{2}, 1/\sqrt{2}\}$ $h_\varphi = \{1/\sqrt{2}, 1/\sqrt{2}\}$

$W_j = \{1, 0, 7, 6\}$

6	7	0	1
	×	$1/\sqrt{2}$	$-1/\sqrt{2}$
$-6/\sqrt{2}$	$-7/\sqrt{2}$	0	$-1/\sqrt{2}$
$6/\sqrt{2}$	$7/\sqrt{2}$	0	$1/\sqrt{2}$ +
$6/\sqrt{2}$	$(1/\sqrt{2})$	$-7/\sqrt{2}$	$(1/\sqrt{2})$ $-1/\sqrt{2}$

$W_{j-1} = \{1/\sqrt{2}, 1/\sqrt{2}\}$ //

//

6	7	0	1
	×	$1/\sqrt{2}$	$1/\sqrt{2}$
$6/\sqrt{2}$	$7/\sqrt{2}$	0	$1/\sqrt{2}$
$6/\sqrt{2}$	$7/\sqrt{2}$	0	$1/\sqrt{2}$ +
$6/\sqrt{2}$	$(13/\sqrt{2})$	$7/\sqrt{2}$	$(1/\sqrt{2})$ $1/\sqrt{2}$

$\{1/\sqrt{2}, 13/\sqrt{2}\}$

(a) $h_\varphi = \{1/\sqrt{2}, 1/\sqrt{2}\}$

$13/\sqrt{2}$	$1/\sqrt{2}$
× $1/\sqrt{2}$	$1/\sqrt{2}$
$13/2$	$1/2$
$13/2$ $1/2$	+
$13/2$ $(14/2)$	$1/2$

$V_{j-2} = \{7\}$ //

(b) $h_\psi = \{-1/\sqrt{2}, 1/\sqrt{2}\}$

$13/\sqrt{2}$	$1/\sqrt{2}$
× $1/\sqrt{2}$	$-1/\sqrt{2}$
$-13/2$	$-1/2$
$13/2$ $1/2$	+
$13/2$ $(-12/2)$	$-1/2$

$W_{j-2} = \{-6\}$ //