

Question

The 2 filters $h1$ and $h2$ are convolved so as to produce the filter $h3$.

Determine the coefficients a , b , and c :

h1			h2			h3				
							1	2	1	
1	2	1	c	b	c	1	8	14	8	1
2	4	2	b	a	b	2	14	24	14	2
1	2	1	c	b	c	1	8	14	8	1
							1	2	1	