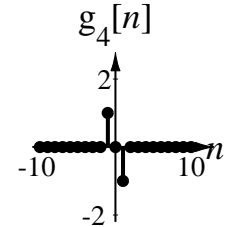
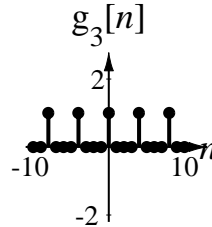
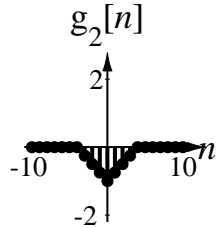
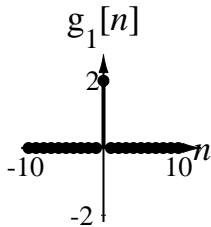


# Solution to ECE 315 Test #5 F03

Below are four DT functions,  $g_1[n]$ ,  $g_2[n]$ ,  $g_3[n]$  and  $g_4[n]$ . Below them are graphs of 8 DT functions labeled a, b, c, d, e, f, g, h. Circle which of the 8 functions (if any) is the indicated convolution in each case. If none of them is, circle "none of these". (1 pt each)



(a)  $g_1[n] * g_1[n]$  none of these

(b)  $g_2[n] * g_2[n]$  none of these

(c)  $g_3[n] * g_3[n]$  none of these

(d)  $g_4[n] * g_4[n]$

(e)  $g_1[n] * g_2[n]$

(f)  $g_1[n] * g_3[n]$

(g)  $g_1[n] * g_4[n]$

(h)  $g_2[n] * g_3[n]$

(i)  $g_2[n] * g_4[n]$

(j)  $g_3[n] * g_4[n]$