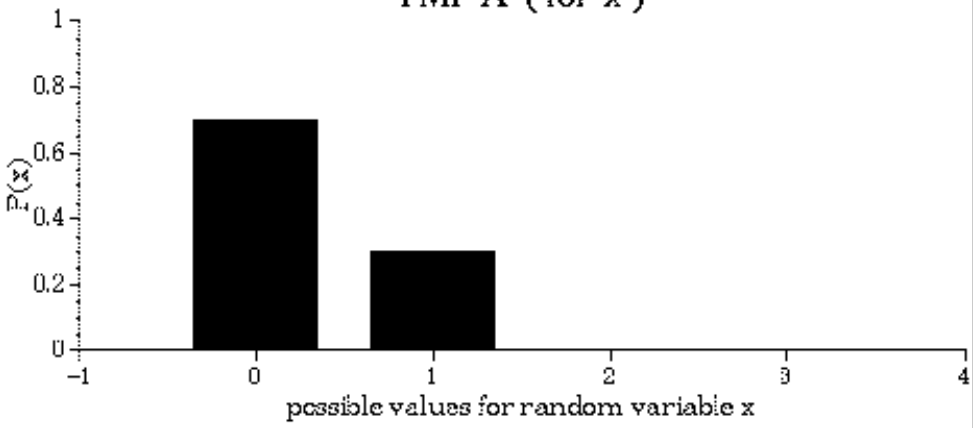
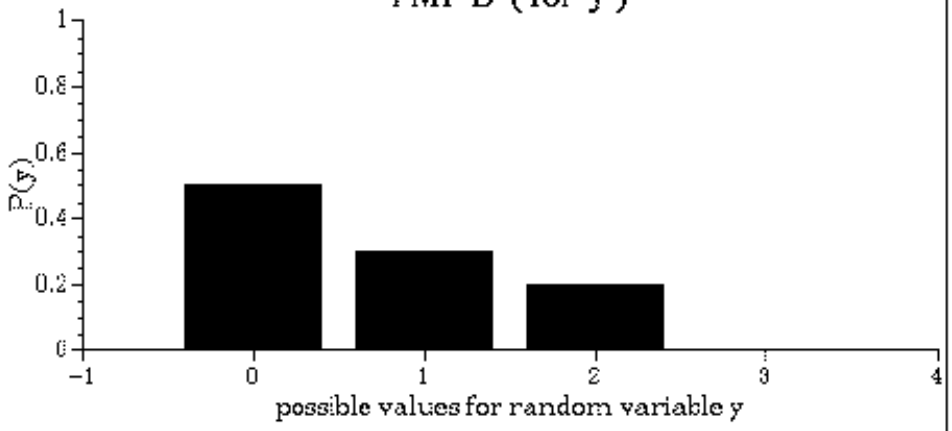
Defining and adding independent random variables.





Sample Point	Probability	Sum	PMF for Sum
[0,0]	0.7 * 0.5 = 0.35	0 + 0 = 0	$P_c[0] = 0.35 = 0.35$
[0,1]	0.7 * 0.3 = 0.21	0 + 1 = 1	$P_c[1] = 0.21 + 0.15 = 0.36$
[0,2]	0.7 * 0.2 = 0.14	0 + 2 = 2	
[1,0]	0.3 * 0.5 = 0.15	1 + 0 = 1	$P_c[2] = 0.14 + 0.09 = 0.23$
[1,1]	0.3 * 0.3 = 0.09	1 + 1 = 2	$P_c[3] = 0.06 = 0.06$
[1,2]	0.3 * 0.2 = 0.06	1 + 2 = 3	DONE