p	Function Achieving Maximum entropy for given $p$	Maximum Entropy Achieved for given $p$
2	$y_i = x_i + x_{i+1}x_{i+2}$	2
3	$y_i = x_i + x_{i+1}x_{i+2} + x_{i+1}x_{i+3}$	2.5
	$y_i = x_i + x_{i+1}x_{i+3} + x_{i+2}x_{i+3}$	2.5
	$y_i = x_i + x_{i+1}x_{i+2} + x_{i+2}x_{i+3} + x_{i+3}x_{i+1}$	2.5
4	$y_i = x_i + x_{i+1}x_{i+4} + x_{i+2}x_{i+3}$	3
	$y_i = x_i + x_{i+1}x_{i+4} + x_{i+2}x_{i+4} + x_{i+3}x_{i+4}$	3
	$y_i = x_i + x_{i+1}x_{i+4} + x_{i+2}x_{i+3} + x_{i+3}x_{i+4}$	3