

x_2

$$P(x_1=i, x_2=j) = P_{ij} = \frac{1}{36}$$

6	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
5	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
4	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
3	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
2	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
1	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$	$\frac{1}{36}$
	1	2	3	4	5	6

Dist. de prob. conjunta x_1 y x_2

$\max(x_1, x_2)$

x_2	1	2	3	4	5	6
6	6	6	6	6	6	6
5	5	5	5	5	5	6
4	4	4	4	4	5	6
3	3	3	3	4	5	6
2	2	2	3	4	5	6
1	1	2	3	4	5	6
	1	2	3	4	5	6

$$P(\max(x_1, x_2)) = \begin{cases} 1 & - \frac{1}{36} \\ 2 & - \frac{3}{36} \\ 3 & - \frac{5}{36} \\ 4 & - \frac{7}{36} \\ 5 & - \frac{9}{36} \\ 6 & - \frac{11}{36} \end{cases}$$

 $\min(x_1, x_2)$

x_2	1	2	3	4	5	6
6	1	2	3	4	5	6
5	1	2	3	4	5	5
4	1	2	3	4	4	4
3	1	2	3	3	3	3
2	1	2	2	2	2	2
1	1	1	1	1	1	1
	1	2	3	4	5	6

$$P(\min(x_1, x_2)) = \begin{cases} 1 & - \frac{11}{36} \\ 2 & - \frac{9}{36} \\ 3 & - \frac{7}{36} \\ 4 & - \frac{5}{36} \\ 5 & - \frac{3}{36} \\ 6 & - \frac{1}{36} \end{cases}$$

max-min

x_2		5	4	3	2	1	0
6	—	5	4	3	2	1	0
5	—	4	3	2	1	0	1
4	—	3	2	1	0	1	2
3	—	2	1	0	1	2	3
2	—	1	0	1	2	3	4
1	—	0	1	2	3	4	5
		1	2	3	4	5	x_1

$$P(\text{max-min}) = \left\{ \begin{array}{l} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{array} \right. \begin{array}{l} \text{—} \\ \text{—} \\ \text{—} \\ \text{—} \\ \text{—} \\ \text{—} \end{array} \begin{array}{l} 6/36 \\ 10/36 \\ 8/36 \\ 6/36 \\ 4/36 \\ 2/36 \end{array}$$