

Utilisation d'une loi binomiale $n=5$; $p=0,01$

x	0	1	2	3	4	5
$P(X=x)$	$P(X=0)$	$P(X=1)$	$P(X=2)$	$P(X=3)$	$P(X=4)$	$P(X=5)$

$$P(X=0) = \text{Binomiale PD } (n=5; p=0,01; x=0) \\ = 0,95099$$

$$P(X \leq 2) = \text{Binomiale CD } (n=5; p=0,01; x=2) = \\ = 0,99999014$$

$$P(X \geq 3) = \text{pas possible à la calculatrice}$$

Donc:

x	0	1	2	3	4	5
$P(X=x)$						

$\underbrace{\hspace{10em}}_{P(X \geq 3)}$

$$\begin{aligned} &> P(X \geq 3) = 1 - P(X < 3) = \\ &= 1 - P(X \leq 2) = \\ &= 1 - \text{Binomiale CD}(5; 0,01; 2) = \\ &= 0,00000986 \end{aligned}$$