

Probabilità e Statistica - 17 Luglio 2007

	C1	C2	C3	C4	E1	E2
F1	0.69228	0.96922	$\frac{7}{8}$	$\frac{3}{16}$	$\begin{cases} f_{X,Y}(2,0) = f_{X,Y}(4,2) = \frac{1}{3} \\ f_{X,Y}(1,\frac{1}{2}) = f_{X,Y}(3,\frac{1}{2}) = \frac{1}{6} \\ f_X(1) = f_X(3) = \frac{1}{6} \\ f_X(2) = f_X(4) = \frac{1}{3} \\ f_Y(0) = f_Y(\frac{1}{2}) = f_Y(2) = \frac{1}{3} \end{cases}$ $\text{cov}[X, Y] = \frac{7}{9}$ $P[X > 2 Y = \frac{1}{2}] = \frac{1}{2}$	<p>(2.65367;3.04633)</p> <p>(2.32422;3.37578)</p>
F2	0.99146	0.91296	$\frac{13}{16}$	$\frac{1}{3}$	$\begin{cases} f_{X,Y}(3,0) = f_{X,Y}(1,1) = \frac{1}{6} \\ f_{X,Y}(2,\frac{1}{4}) = f_{X,Y}(4,\frac{1}{4}) = \frac{1}{3} \\ f_X(1) = f_X(3) = \frac{1}{6} \\ f_X(2) = f_X(4) = \frac{1}{3} \\ f_Y(0) = f_Y(1) = \frac{1}{6}, \quad f_Y(\frac{1}{4}) = \frac{2}{3} \end{cases}$ $\text{cov}[X, Y] = -\frac{2}{9}$ $P[X > 3 Y = \frac{1}{4}] = \frac{1}{2}$	<p>(3.41887;4.68113)</p> <p>(3.64992;4.45008)</p>
F3	0.87644	0.47178	$\frac{23}{25}$	$\frac{27}{16}$	$\begin{cases} f_{X,Y}(2,0) = f_{X,Y}(4,1) = \frac{1}{3} \\ f_{X,Y}(1,\frac{1}{4}) = f_{X,Y}(3,\frac{1}{4}) = \frac{1}{6} \\ f_X(1) = f_X(3) = \frac{1}{6} \\ f_X(2) = f_X(4) = \frac{1}{3} \\ f_Y(0) = f_Y(\frac{1}{4}) = f_Y(2) = \frac{1}{3} \end{cases}$ $\text{cov}[X, Y] = \frac{7}{18}$ $P[X > 2 Y = \frac{1}{4}] = \frac{1}{2}$	<p>(2.54204;3.15796)</p> <p>(2.52993;3.17007)</p>
F4	0.06376	0.66304	$\frac{22}{25}$	$\frac{3}{4}$	$\begin{cases} f_{X,Y}(1,2) = f_{X,Y}(3,0) = \frac{1}{6} \\ f_{X,Y}(2,\frac{1}{2}) = f_{X,Y}(4,\frac{1}{2}) = \frac{1}{3} \\ f_X(1) = f_X(3) = \frac{1}{6} \\ f_X(2) = f_X(4) = \frac{1}{3} \\ f_Y(0) = f_Y(2) = \frac{1}{6}, \quad f_Y(\frac{1}{2}) = \frac{2}{3} \end{cases}$ $\text{cov}[X, Y] = -\frac{4}{9}$ $P[X > 3 Y = \frac{1}{2}] = \frac{1}{2}$	<p>(3.64764;4.45236)</p> <p>(3.62937;4.47063)</p>