

Probabilità e Statistica - 11 Settembre 2012

	C1	C2	C3	C4	E1	E2
F1	-0.44	0.26390	$\frac{9}{25}\sigma^2$	0.25	$f_{X,Y}(0,1) = \frac{1}{15}$ $f_{X,Y}(0,3) = \frac{2}{15}$ $f_{X,Y}(1,1) = \frac{2}{15}$ $f_{X,Y}(1,3) = \frac{2}{3}$ $\text{cov}(X,Y) = \frac{4}{75}$	$F_X(x) = \begin{cases} 0 & \text{se } x < 0 \\ \sin(2x) & \text{se } 0 \leq x < \frac{\pi}{4} \\ 1 & \text{se } x \geq \frac{\pi}{4} \end{cases}$ $P[X > \frac{\pi}{6}] = 1 - \frac{\sqrt{3}}{2}$ $E[X] = \frac{\pi}{4} - \frac{1}{2}$ $E[\frac{1}{\cos(2x)}] = \frac{\pi}{2}$
F2	-0.32	0.62419	$\frac{11}{25}\sigma^2$	0.875	$f_{X,Y}(0,1) = \frac{2}{15}$ $f_{X,Y}(0,3) = \frac{4}{15}$ $f_{X,Y}(1,1) = \frac{4}{15}$ $f_{X,Y}(1,3) = \frac{1}{3}$ $\text{cov}(X,Y) = -\frac{4}{75}$	$F_X(x) = \begin{cases} 0 & \text{se } x < 0 \\ 1 - \cos(2x) & \text{se } 0 \leq x < \frac{\pi}{4} \\ 1 & \text{se } x \geq \frac{\pi}{4} \end{cases}$ $P[X > \frac{\pi}{6}] = \frac{1}{2}$ $E[X] = \frac{1}{2}$ $E[\frac{1}{\sin(2x)}] = \frac{\pi}{2}$