

Probabilità e Statistica - 16 Giugno 2009

	C1	C2	C3	C4	E1	E2
F1	0.41351	0.94208	$\frac{1}{6}$	$\frac{1}{6}$	$c = \frac{3}{4\theta\sqrt{2\theta}}$ $\Theta = \frac{5}{6}\bar{X}_n$ $\Theta$ corretto $a = \frac{1}{2}$	$f_X(x) = \begin{cases} \frac{1}{2} \cos x & -\frac{\pi}{2} < x < \frac{\pi}{2} \\ 0 & \text{altrove} \end{cases}$ $P[0 < X < \sqrt{77}   X < \frac{\pi}{4}] = \frac{\sqrt{2}}{2 + \sqrt{2}}$ indipendenti $E[2X - \pi] = -\pi$
F2	0.22547	0.16308	$\frac{1}{6}$	$\frac{1}{12}$	$c = \frac{1}{2\theta\sqrt{3\theta}}$ $\Theta = \frac{5}{9}\bar{X}_n$ $\Theta$ corretto $a = -\frac{1}{3}$	$f_X(x) = \begin{cases} \frac{1}{2} \sin x & 0 < x < \pi \\ 0 & \text{altrove} \end{cases}$ $P[-\sqrt{7} < X < \frac{\pi}{2}   X > \frac{\pi}{4}] = \frac{\sqrt{2}}{2 + \sqrt{2}}$ indipendenti $E[2X - \pi] = 0$
F3	0.33129	0.05792	$\frac{1}{6}$	$\frac{1}{8}$	$c = \frac{3}{8\theta\sqrt{4\theta}}$ $\Theta = \frac{5}{12}\bar{X}_n$ $\Theta$ corretto $a = -\frac{3}{4}$	$f_X(x) = \begin{cases} -\frac{1}{2} \sin x & \pi < x < 2\pi \\ 0 & \text{altrove} \end{cases}$ $P[-\sqrt{7} < X < \frac{3}{2}\pi   X > \frac{5}{4}\pi] = \frac{\sqrt{2}}{2 + \sqrt{2}}$ indipendenti $E[2X - \pi] = 2\pi$
F4	0.26669	0.83692	$\frac{1}{6}$	$\frac{3}{16}$	$c = \frac{1}{4\theta\sqrt{6\theta}}$ $\Theta = \frac{5}{18}\bar{X}_n$ $\Theta$ corretto $a = -\frac{7}{6}$	$f_X(x) = \begin{cases} -\frac{1}{2} \cos x & \frac{\pi}{2} < x < \frac{3}{2}\pi \\ 0 & \text{altrove} \end{cases}$ $P[-\sqrt{7} < X < \pi   X > \frac{3}{4}\pi] = \frac{\sqrt{2}}{2 + \sqrt{2}}$ indipendenti $E[2X - \pi] = \pi$