

Given the random variables **X** and **Y**:

- Fill in the last four columns of the table with: **YES, NO, UNKNOWN**

	X and Y are Independent	X and Y are Uncorrelated	X and Y are Orthogonal	E[X] is zero
$E[XY]=E[X]E[Y]$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=E[X]E[Y]$ $E[X]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$f_{XY}(x,y)=f_X(x)f_Y(y)$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$f_{XY}(x,y)=f_X(x)f_Y(y)$ $E[Y]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$f_{XY}(x,y)=f_X(x)f_Y(y)$ $E[XY]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=E[X]E[Y]$ X and Y are jointly normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=0$ $E[Y]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[Y]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[Y]=0$ X and Y are jointly normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$C_{XY}=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$C_{XY}=0$ X and Y are jointly normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=0$ X and Y are jointly normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\rho_{XY}=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\rho_{XY}=0$ X and Y are jointly normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$C_{XY}=0$ $E[Y]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\rho_{XY}=0$ $E[Y]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$E[XY]=0$ $f_{XY}(x,y)=f_X(x)f_Y(y)$ $E[Y]\neq 0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$C_{XY}=0$ $E[XY]=0$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>