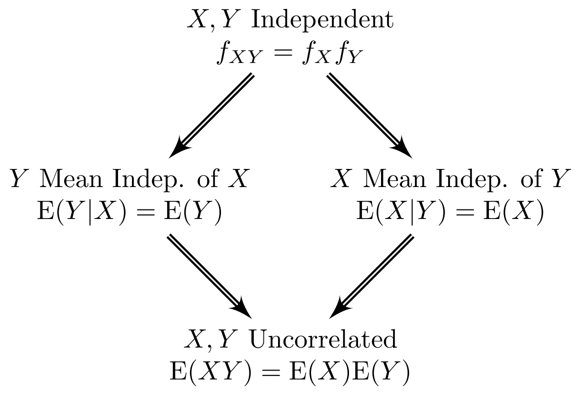

X, Y Independent
$f_{XY} = f_X f_Y$
Y Mean Indep. of X
$\mathrm{E}(Y|X) = \mathrm{E}(Y)$
X Mean Indep. of Y
$\mathrm{E}(X|Y) = \mathrm{E}(X)$
X, Y Uncorrelated
$\mathrm{E}(XY) = \mathrm{E}(X)\mathrm{E}(Y)$