Math 525 - Probability

Quiz 6

1. Give an integral expression for the joint distribution function of two jointly continuous random variables X and Y.

2. Give an integral expression with integrand involving $f_{(X,Y)}$, that describes the marginal density function f_X.

3. If two random variables are jointly normal (that is, their joint distribution is bivariate normal) and are uncorrelated, is it true that they must be independent?