

Two Random Variables with Normal Distribution Tutorial Exercise

Let two joint normal, uncorrelated random variables X, Y , having mean values $m_X = 3$, $m_Y = 6$ and variances $\sigma_X = \sigma_Y = 1$. Calculate the probability of the event $\{x_1 < X \leq x_2, y_1 < Y \leq y_2\}$.