

MA 587/687

Name (Print last name first):

Quiz I

Question 1

Let $Z = \min\{X, Y\}$. Write the distribution function $F_Z(z)$ in terms of $F_X(x)$ and $F_Y(y)$. Justify all steps.

Question 2

We draw two cards without replacement from a deck of cards which are numbered 1 through 52. If X and Y represent the value of the number written on the randomly chosen cards, what is their correlation coefficient ρ_{XY} ? Justify all steps.