MA396 In-Class Exercise - Group I

Names:

a) b)

c) d)

e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.

MA396 In-Class Exercise - Group II

Names:

a) b)
c) d)
e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.

MA396 In-Class Exercise - Group III

Names:

a) b)
c) d)
e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.

MA396 In-Class Exercise - Group IV

Names:

a) b)
c) d)
e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.

MA396 In-Class Exercise - Group V

Names:

a) b)
c) d)
e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.

MA396 In-Class Exercise - Group VI

Names:

a) b)
c) d)
e) f)

1) Construct a joint density function with two variates, X and Y, so that $\text{Cov}(X, Y) \neq 0$.

a) Find E(X),E(Y),E(X^2),E(Y^2),E(XY),Var(X),Var(Y), Cov(X, Y).

b) Find the variance-covariance matrix V.

c) Find the correlation matrix R

d) Find the variance of $Z = 2X - 4Y$.