F14076083 魏湧致

7.12

⟹ J = = y1

Joint density function : g(y1,y2) = y1 =

Marginal distribution : h1(y1) = =

h2(y2) = = 1

g(y1,y2) = h1(y1) h2(y2) ⟹ independent

7.14

y = x2 ⟹ x1= x2=- J1= ,J2=

g(y) = + =

7.18

Mx(t) = = pet = pet = pet ,

|<1 ⟹ t<−ln(q)

|t=0= pet + pet |t=0 = |t=0 =

|t=0 = |t=0 =

E(X) =

Var(X) = =

7.22

|t=0 =|t=0 =|t=0 = v

|t=0 = |t=0= v2+2v

E(X) = v

Var(X) = v2+2v-v2 = 2v