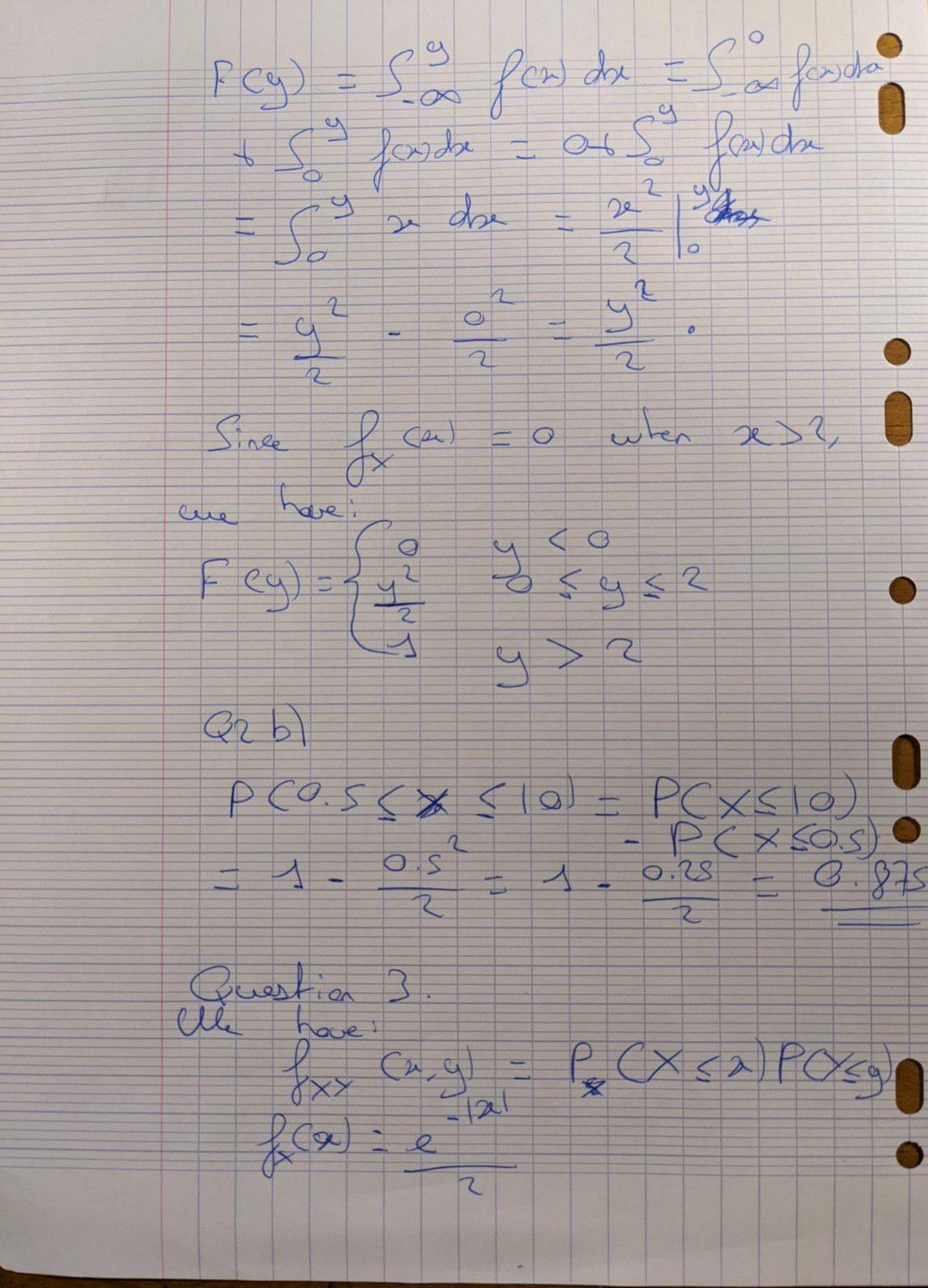
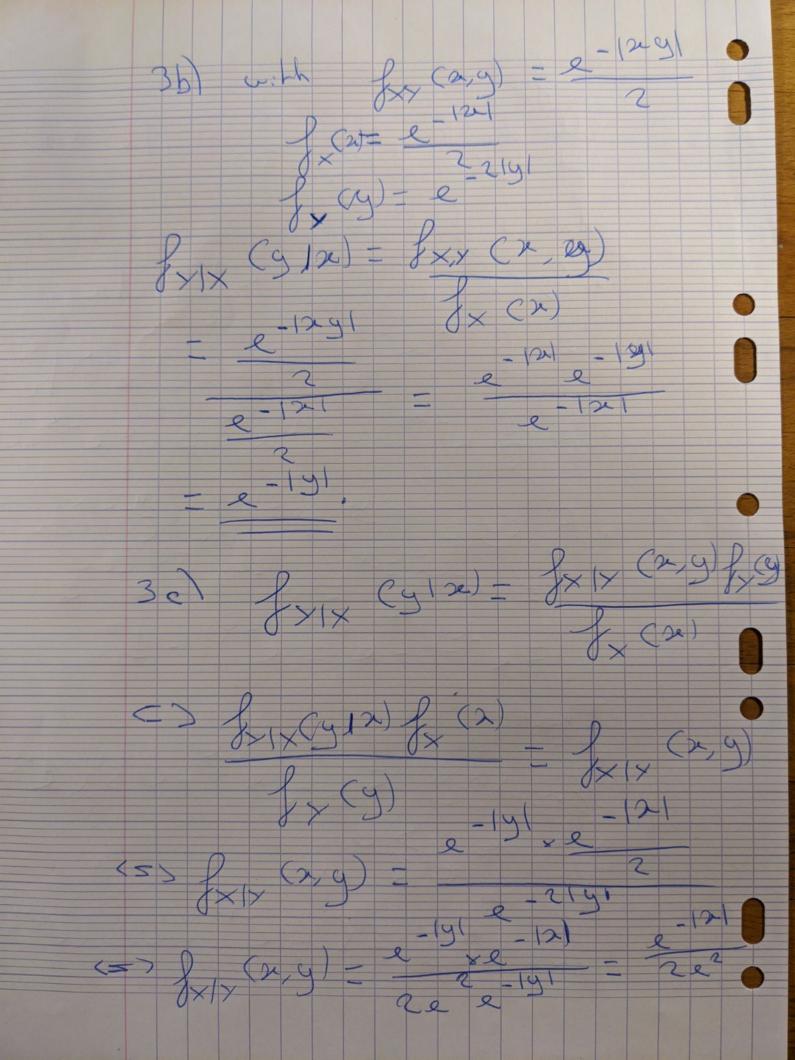
5 Petit ST3009 Weekly 088 igment 20 Question sa X is carrineses thes PCX = 0.5) = 0 b) PCO.2S & 2 & S O.S) Z PCGS)-PCG = PCXCO.S) - PCXCO.2S) = O.S - O.2S = O.2S e) PC-1 < 2 < 0.5) = P (2 50.5) = 0.5 Ocestia 2. a) if 2 < 0 Her: Ecg = Signal + Signal



8x(y) = e -2(y) and by (2) = PCX (2) = PCX (2) let's find Fx ad Fx. · F (2) = 5 20 2 2 doe 6 = 50 2 - 2 de b = 1 2 2 10 {xx (29) = (3 e - 0.5) (2 - 9) If any E 1/2 Hen:

If any E 1/2 Len:

If any E 1/2



This: fx1x (25y) = (2e2) e 121 Question 4 Seriables is early for the product of
the marainol polls. This:

2 (i) - 2 (i) - 2 (i) - 2 (i) DI Gradient oscent is essentially like andient descent with the difference of next mi ziver while dessent is the process of minimizing Thes by taking the loss finetion for gradient descent and militiplying it bey

Let we on then lake for a merimum

Ledwe:

Leg (1-6 e - 90 2 2) Shops as he gradient desant isna, the does loss function to down a colore for @ which nox mozes the PDF-fre