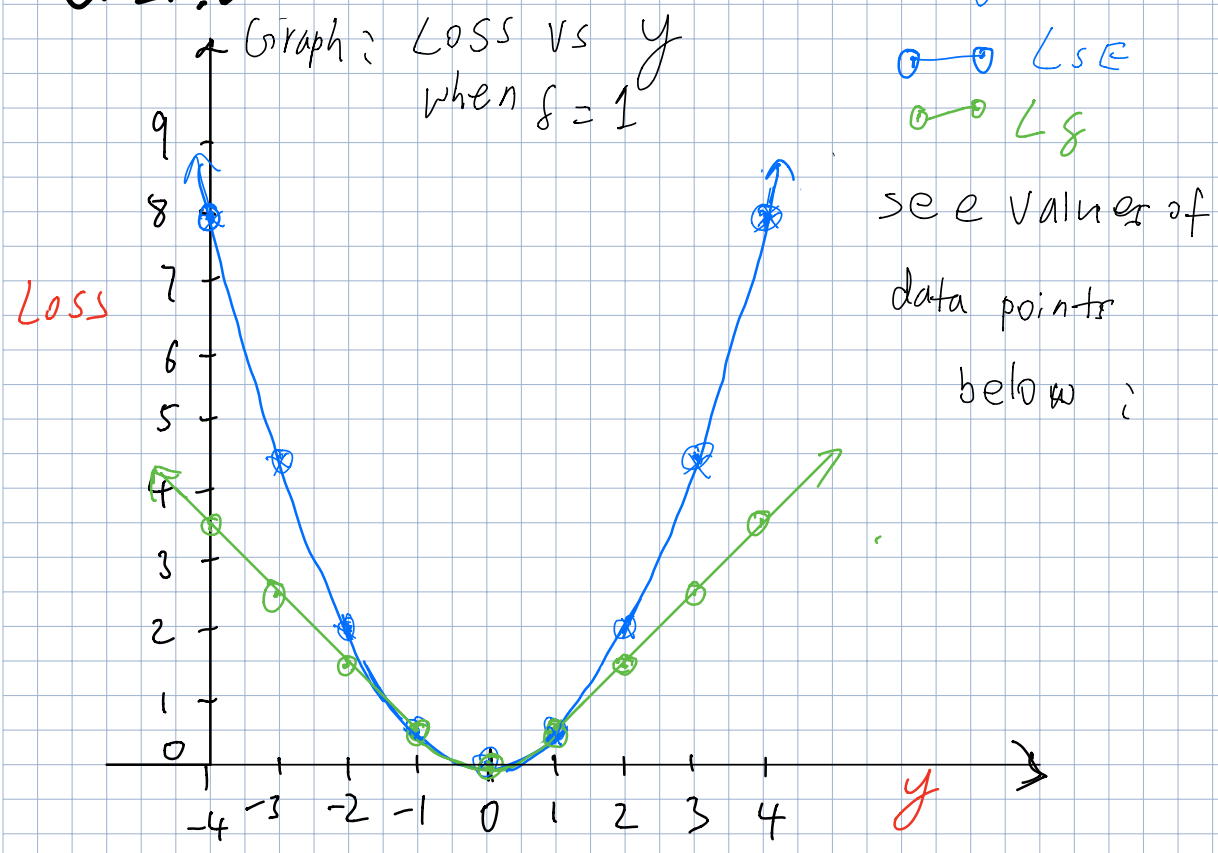
Assignment 2

Q1 a)



Values Calculated:

$L_{SE}(y, t=0) = \frac{1}{2}y^2$

y	L_{SE}
-4	8
-3	4.5
-2	2

Assume $\delta = 1$

$L_\delta(y,t) = \begin{cases} \frac{1}{2}y^2 & \text{if } |y| \le 1 \\ |y| - \frac{1}{2} & \text{if } |y| > 1 \end{cases}$

$t = 0$

$\delta = 1$

y	L_δ
-4	3.5
-3	2.5

-1	0.5
0	0
1	0.5
2	2
3	4.5
4	8

-2	1.5
-1	0.5
0	0
1	0.5
2	1.5
3	2.5
4	3.5