Y = B0 + B1X1.

(1 X)(B0

B1) = B0+B1X = Y

B0 TV Raido /

(1 X11 X12 ) (B0 = (Y1

1 X21 X22) (B1) = Y2

(B2) =Y3

= Y1 = B0 + B1\*X11 + B2\*X12 ... + E.(do not care)

MSE = mean(sum( Y- Yhat)square)

Yi hat = Y1 = B0 + B1\*X11 + B2\*X12 ... + E(but do not care)

To find Beta = Minimize the MSE.

Smallest MSE ; because MSE is list due to X, Y are list.

Smallest MSE’s beta value. = B hat.

Derivative MSE = Normal Equation XTX^-1 XT\*Y -> make matrix (J+1)\*1

SO you can figure it out, smallest( B0 + B1\*X11 + B2\*X12 ... + E.)