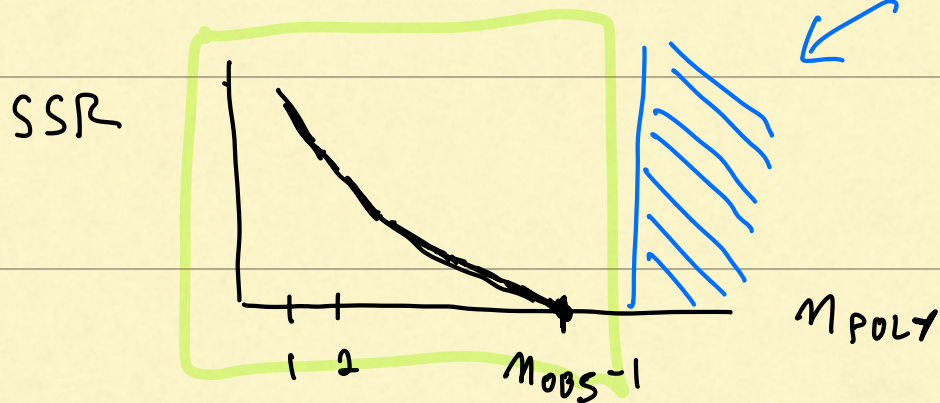
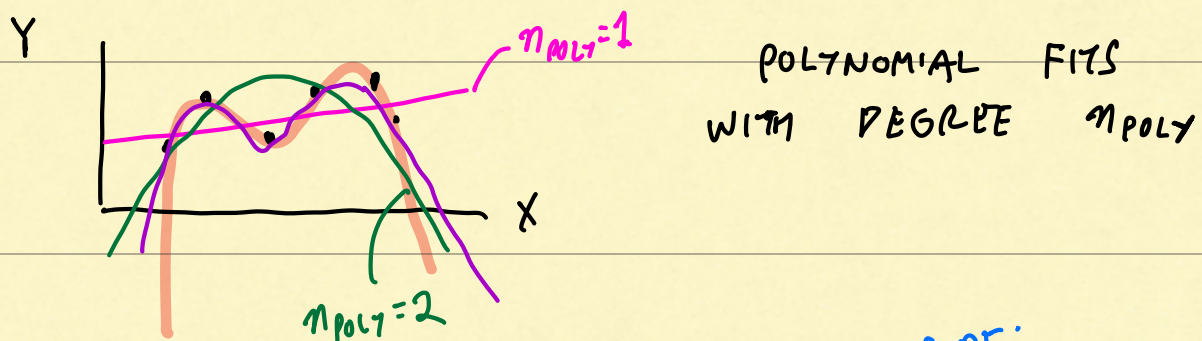
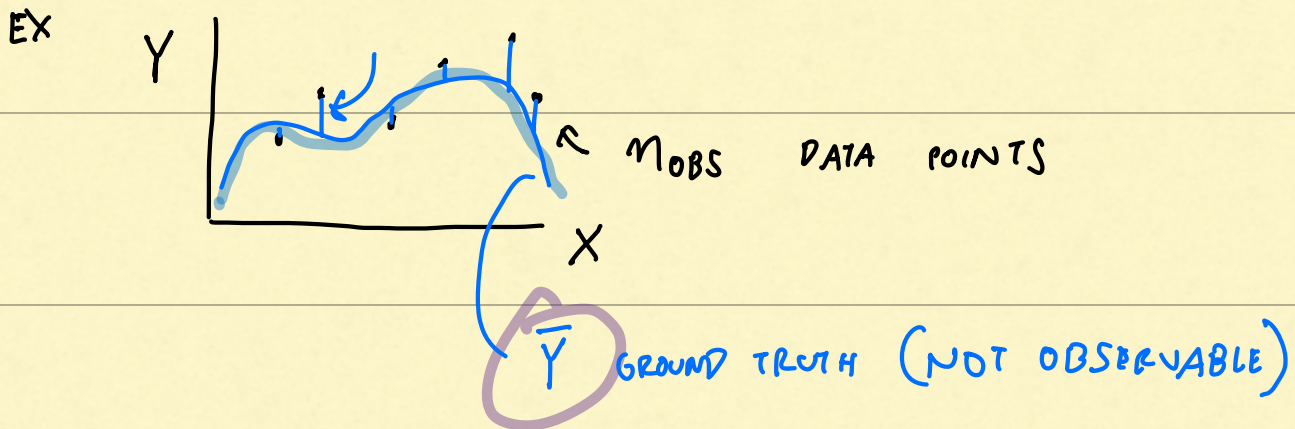


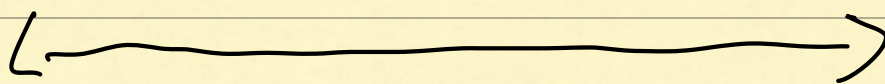
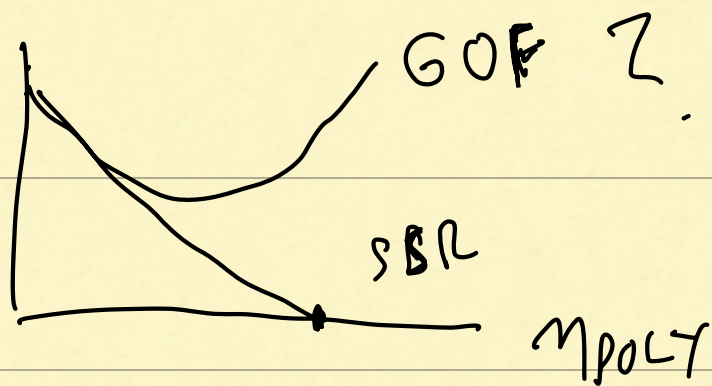
MODEL COMPLEXITY : VARIANCE - BIAS TRADE OFF



ASIDE:
WHAT IF
 $m_{POLY} > m_{OBS}$?

GOODNESS OF FIT

$$GOF = \sum_i (\bar{Y} - y(x_i))^2$$



SIMPLE
MODELS

COMPLEX
MODELS

BETTER FITS

HIGH
BIAS

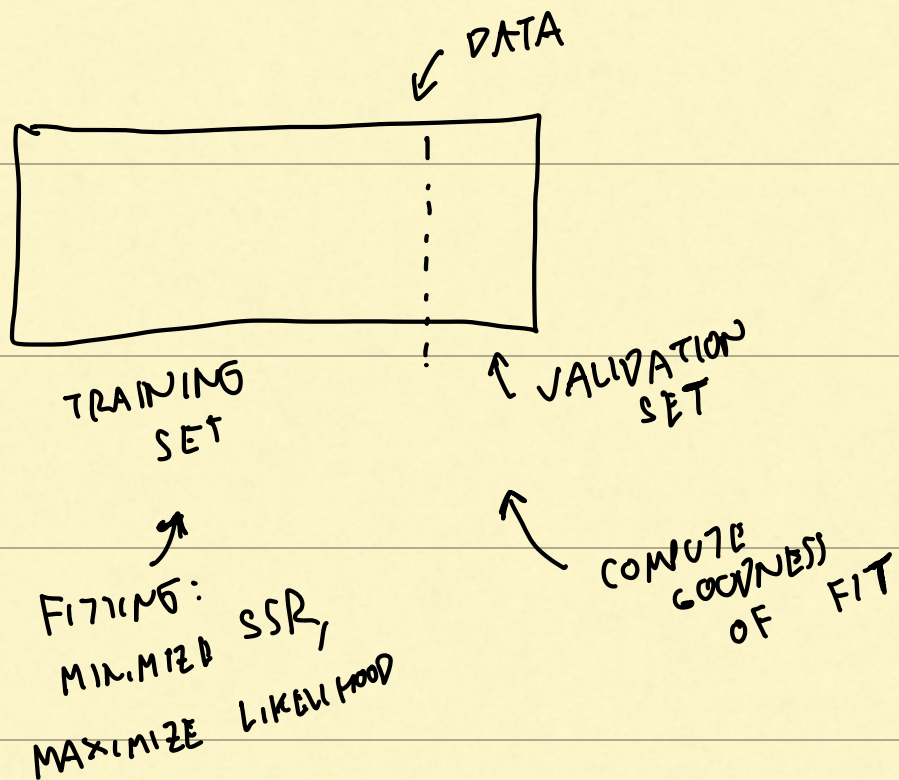
FAILS ON
REPEATED
DATA

LOW
VARIANCE

HIGH VARIANCE

LOW BIAS

CROSS - VALIDATION



LEAVE ONE OUT - LOOCV

