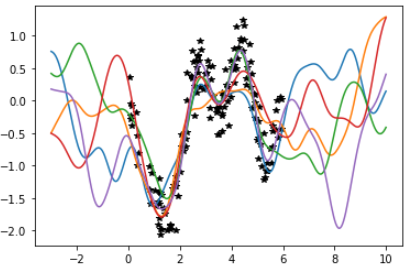
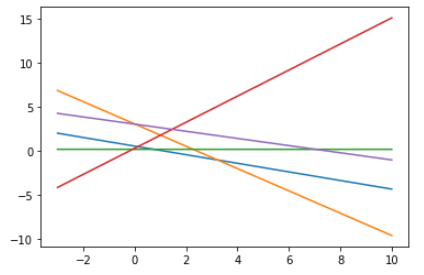
Q1

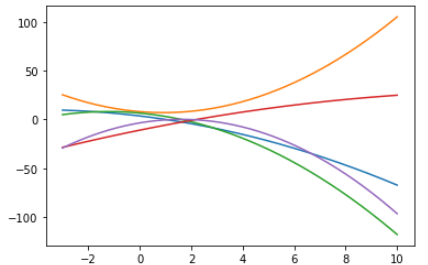


Q2

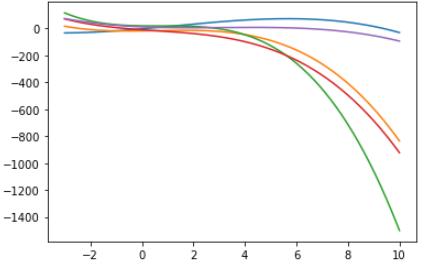
d = 1



d = 2



d = 3



Q3

When d = 1, the covariance function represents linear function.

When d = 2, the covariance function represents quadratic function.

When d = 3, the covariance function represents cubic function.

Q4

1. *p*(y|X, w)= *N* ( Xw, σ2n *I* )

log() = log() + log() – log()

log() =

1. Yes, it does. Ridge regression
2. Linear covariance function