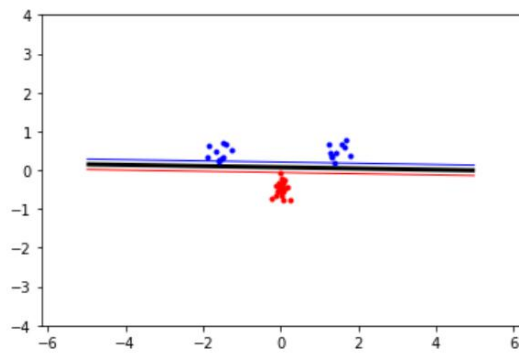
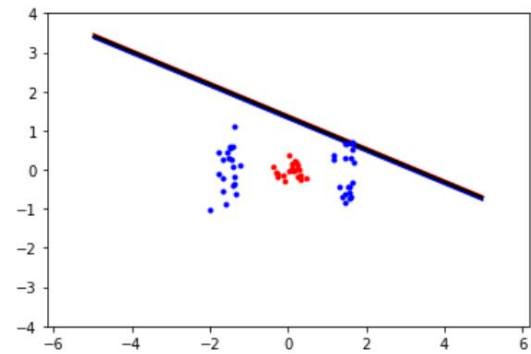


1.

True

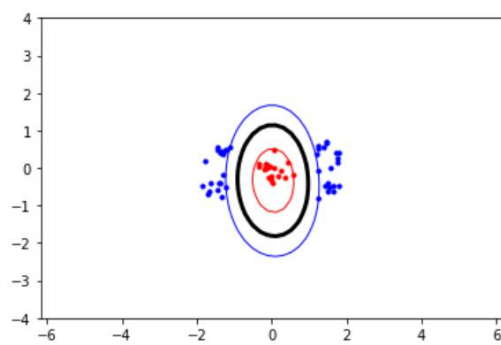


False



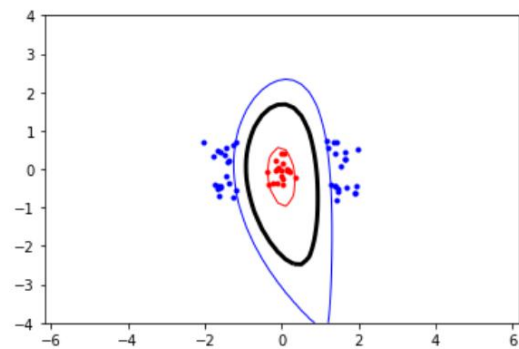
2.

True



Left:RBF ( $\sigma = 2$ )

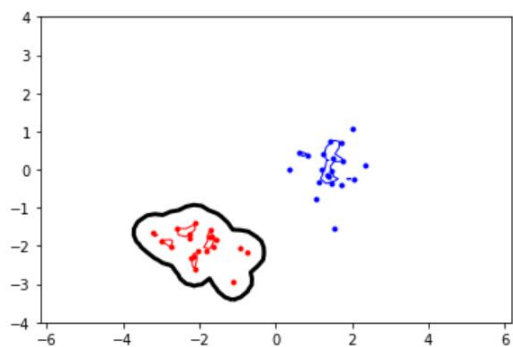
True



Right:Polynomial ( $p=3$ )

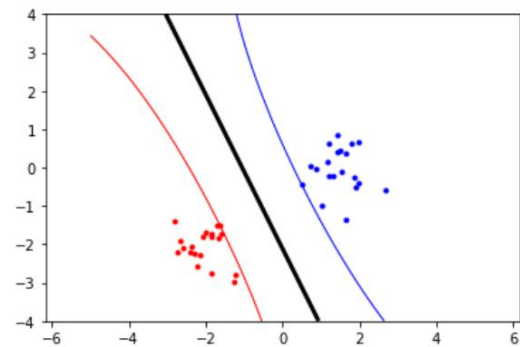
3.

True



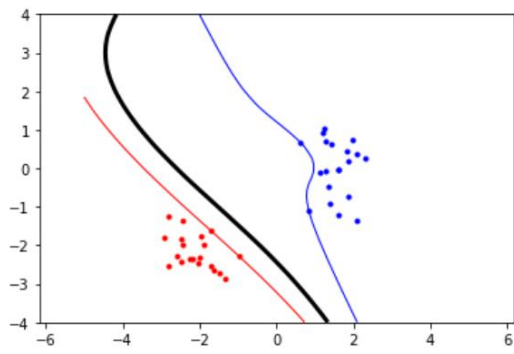
$\sigma = 0.2$ (overfit, more variance)

True



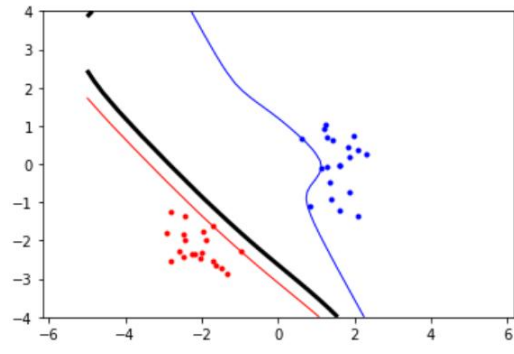
$\sigma = 6$ (smoother)

True



$p=3$

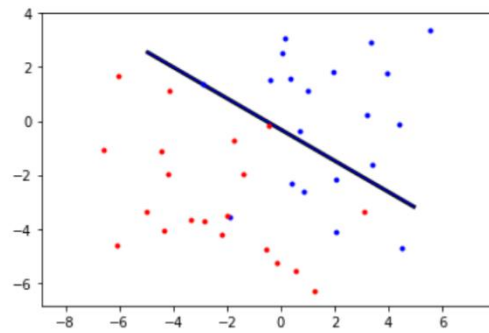
True



$p=5$ (overfit)

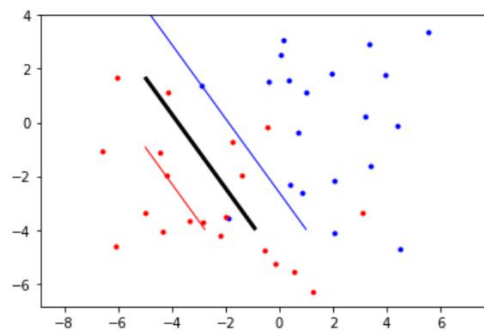
4.

False



$C=1e6$

True



$C=7$

5.

It depends on the noise data.