Q.2.d: Plot of cost function
NAGSGD: a=0.5 , b=0.6 | AdaGrad: a=2.6
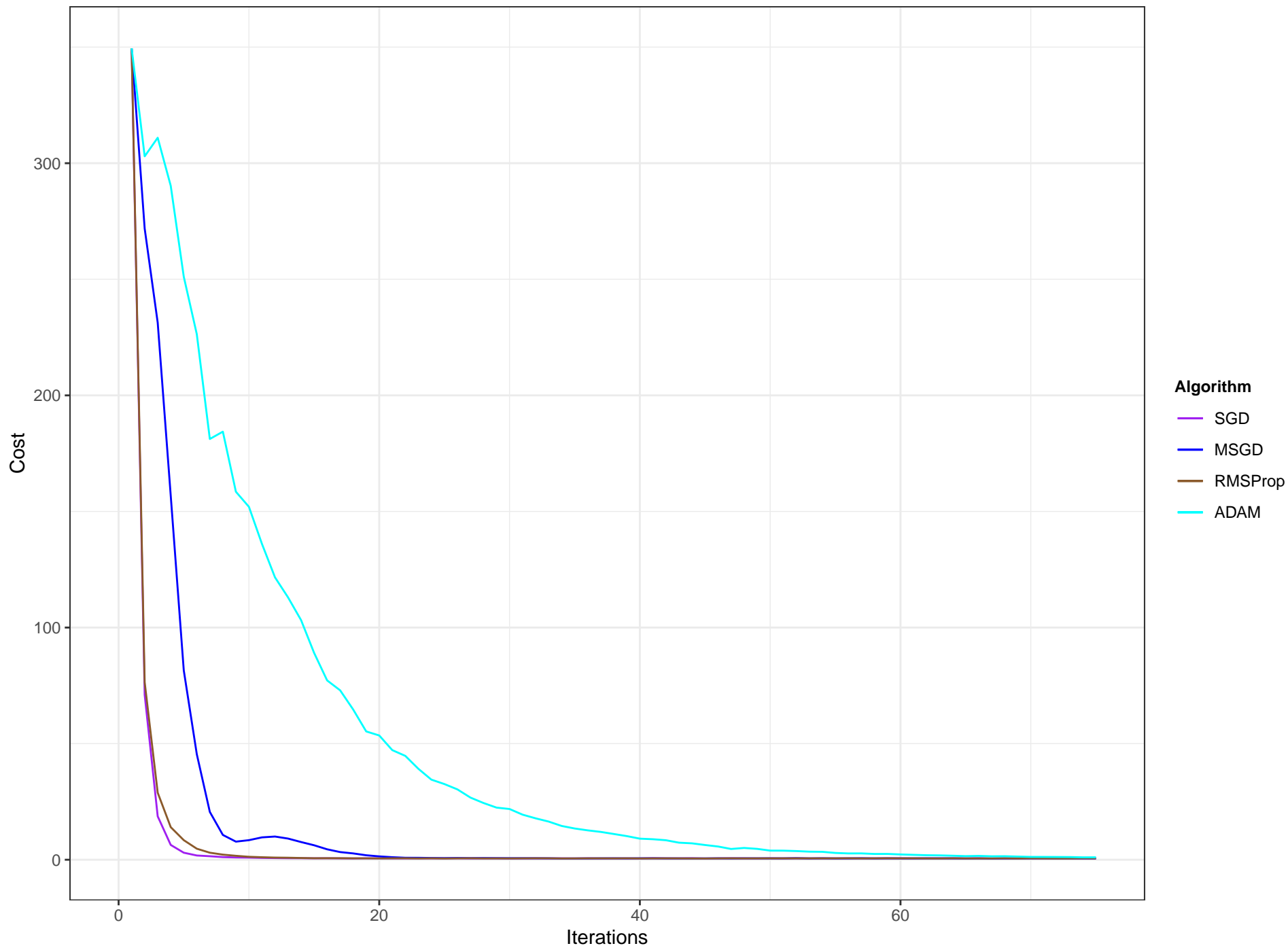
Cost

Iterations

Algorithm
— NAGSGD
— AdaGrad
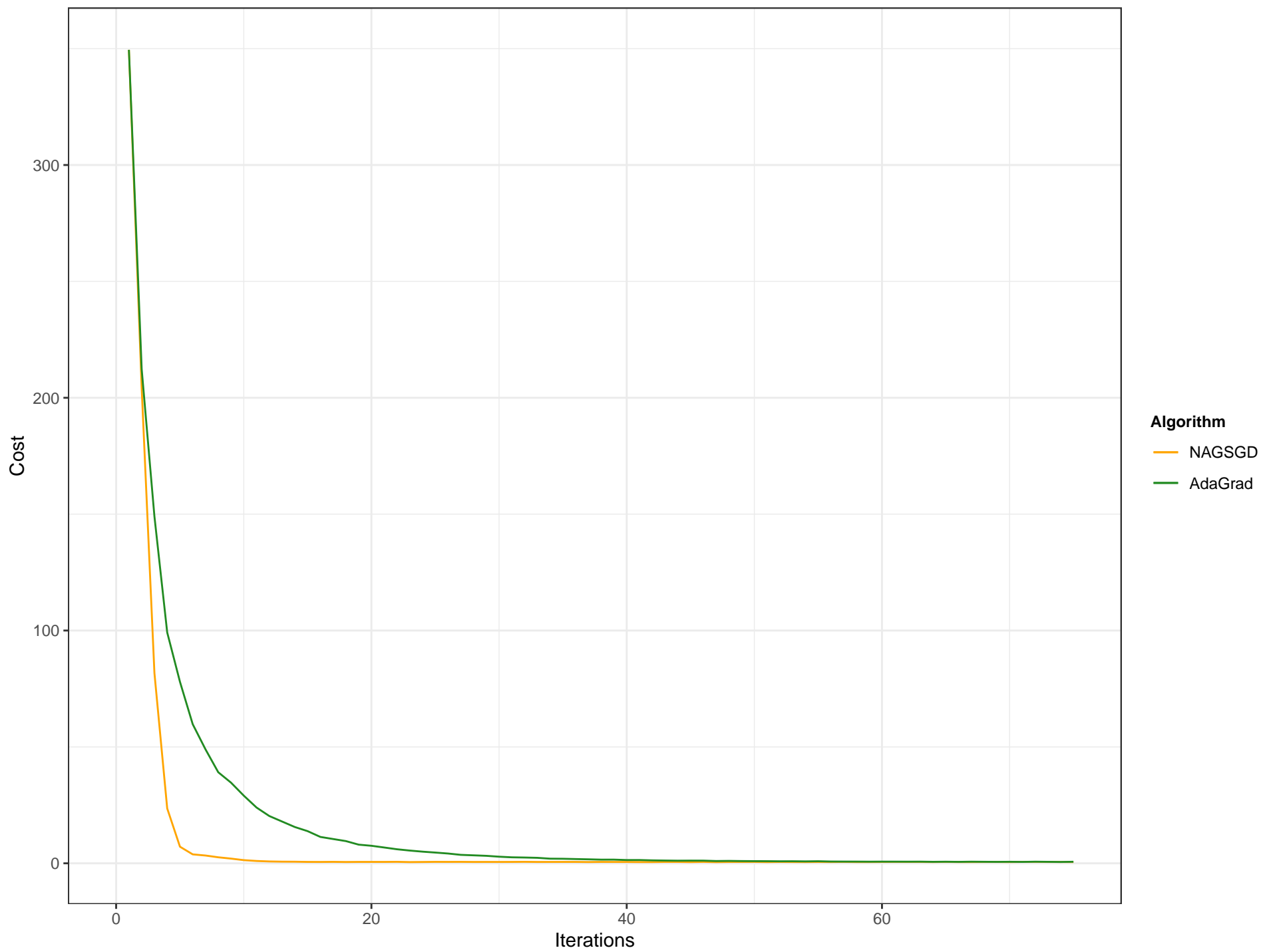
Q.2.d: Additional plots of cost functions

SGD: a=0.5 | MSGD: a=0.26 , b=0.75 | RMSProp: a=0.208 , c=0.999 |
ADAM: a=0.45 , b=0.6, c=0.999

Q.2.e: Phase plot of θ_2 vs θ_3

GD: a=0.6 | MSGD: a=0.26 , b=0.75 | AdaGrad: a=2.6
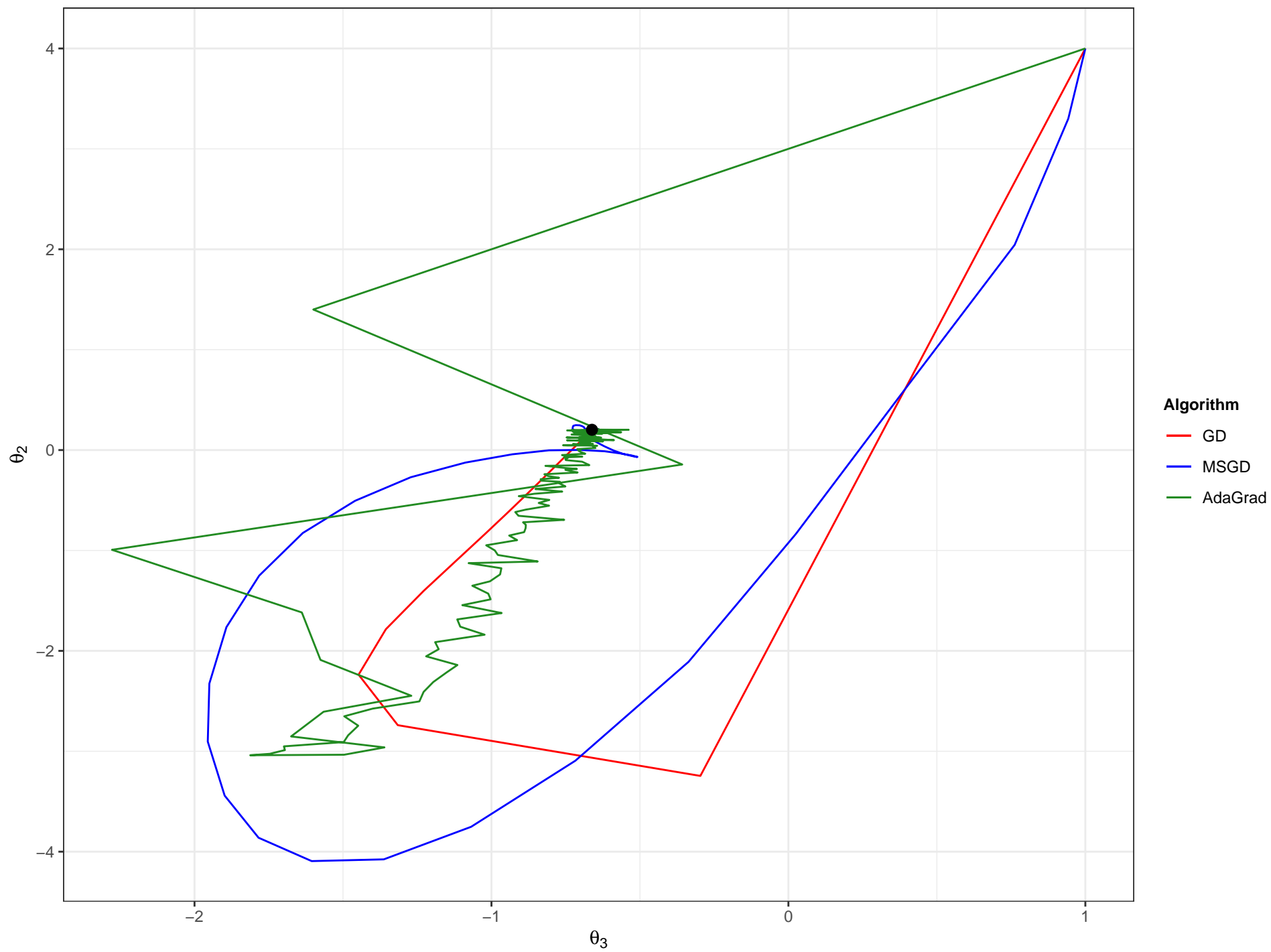
Q.2.e: Additional phase plots of θ_2 vs θ_3

SGD: a=0.5 | NAGSGD: a=0.5 , b=0.6 | RMSProp: a=0.208 , c=0.999
ADAM: a=0.45 , b=0.6, c=0.999