Q.1.d: Plot of cost function
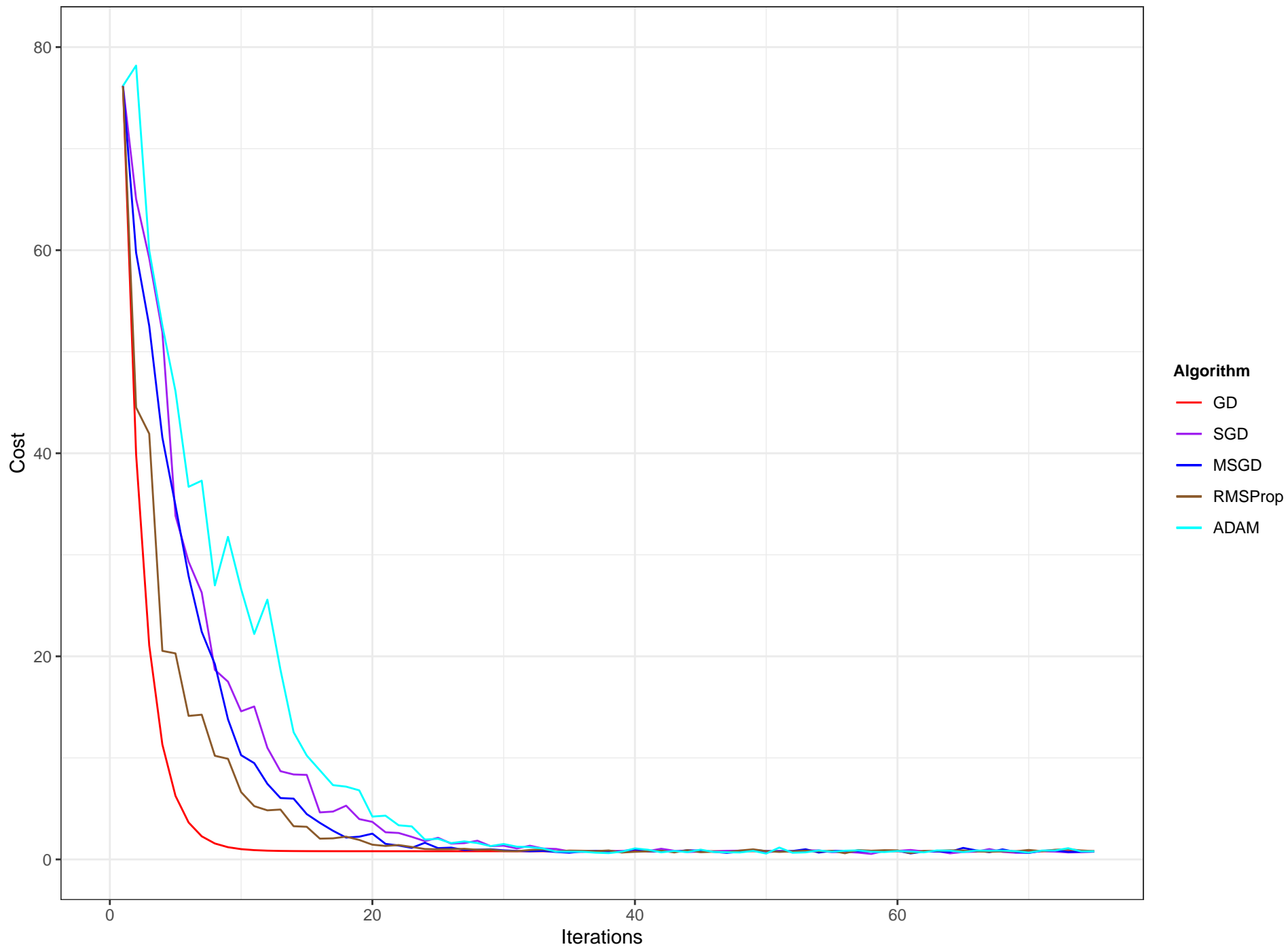
NAGSGD: a=0.155 , b=0.58 | AdaGrad: a=1.5

Algorithm
— NAGSGD
— AdaGrad
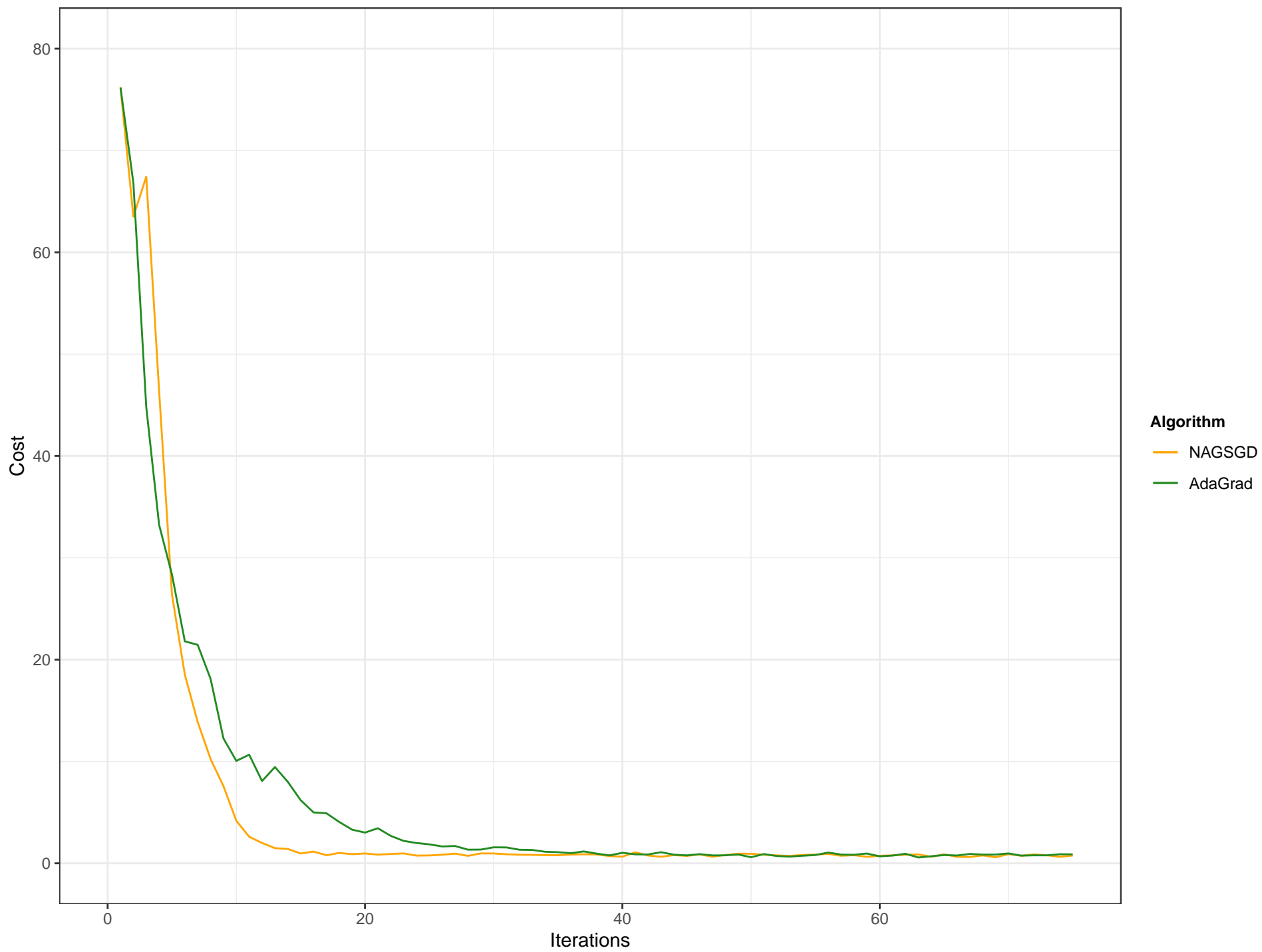
Q.1.d: Additional plots of cost functions

GD: a=0.28 | SGD: a=0.085 | MSGD: a=0.105 , b=0.27
RMSProp: a=0.054 , c=0.999 | ADAM: a=0.45 , b=0.554 , c=0.999

Q.1.e: Phase plot of θ_0 vs θ_1

GD: a=0.28 | RMSProp: a=0.054 , c=0.999

Algorithm

— GD

— RMSProp
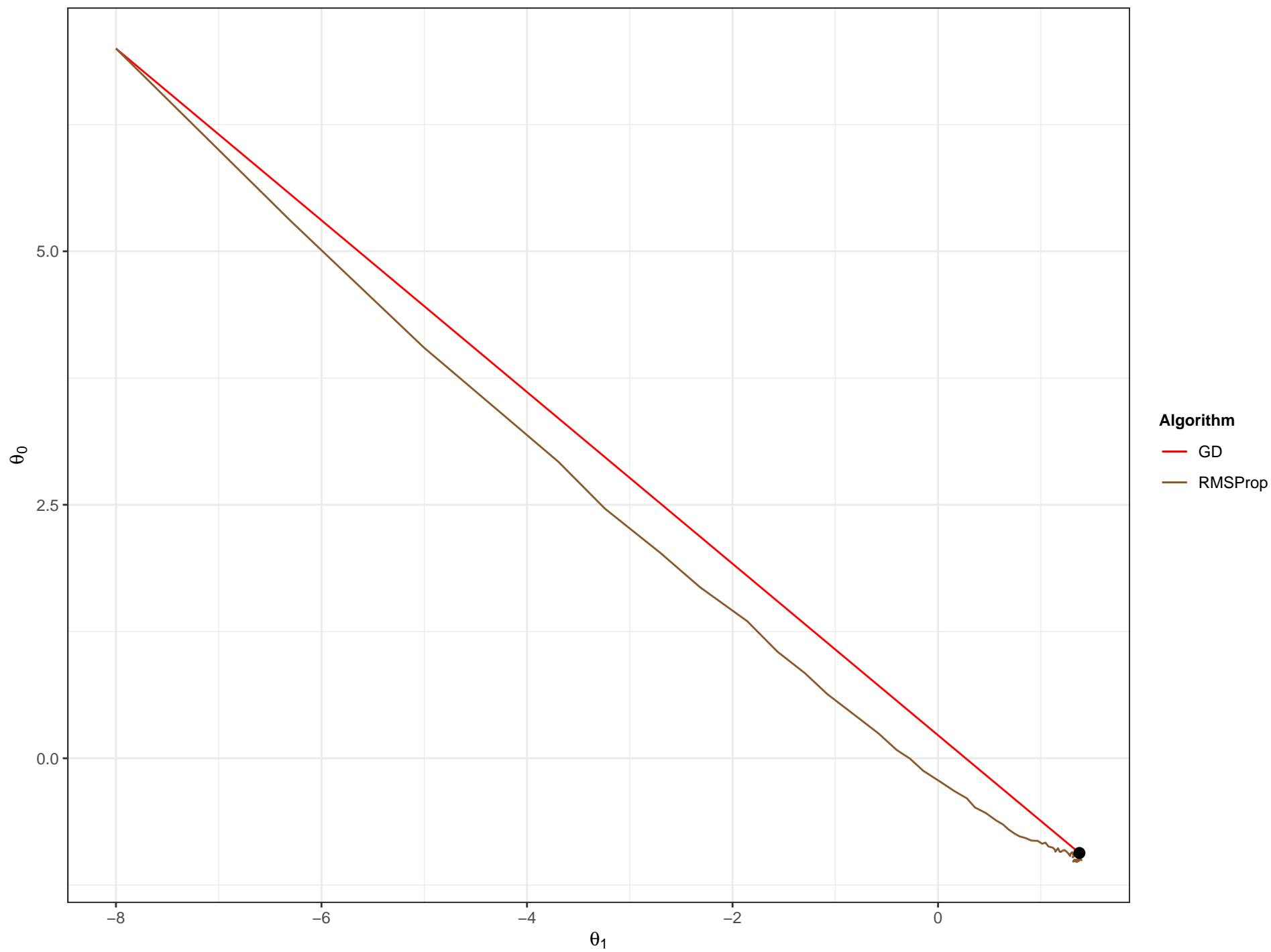
Q.1.e: Additional phase plots of θ_0 vs θ_1

SGD: a=0.085 | MSGD: a=0.105 , b=0.27 | NAGSGD: a=0.155 , b=0.58
AdaGrad: a=1.5 | ADAM: a=0.45 , b=0.554 , c=0.999