## HW2

- 2a) all the answers seem reasonable, clear and correct.
- 2b) an explicit proof.
- 2c) generally speaking, the proof seems correct but we think there is a small issue to notice about the answer. You should show why the domain of  $w_k$  is bounded (and as a result, the domain of the gradient of f is bounded). Since, in the case of increasing alpha, it is possible that convergence will not happen.