**2 - Backpropagation with the Hyperbolic Tangent Function**

Revise the backpropagation algorithm for two layers (see slide 34 of Lecture

2014-11-14) so that it operates on units using the hyperbolic tangent (squashing)

function in place of the sigmoid function (see the remark on slide 28 of Lecture

2014-11-14). That is, the output o of a single unit is defined by

Give the weight update rule for output layer weights and hidden layer weights.

First we need to find a derivative of function to use it in update procedure:

Having this derivative we can formulate update rules for output and hidden layer weights:

Having corresponding value for each output and hidden weight we can formulate next weight update rule: