Name:	Date:	Period:

Lab19: Neural Networks, Negation

- Attach a code printout.
- Use no hidden layer, learning rate $\mu = 0.8$, and step size $\Delta w = 0.1$.
- Find weights w_0 and w_1 by:
  - Finite differences
  - Backpropagation
- In each case $w_i = w_i - \mu\left(\frac{\Delta E}{\Delta w}\right)$.
- Test data is $(tx_0, tz_0) = (0, 1)$ and $(tx_1, tz_1) = (1, 0)$.
- What weights are found by each method?

- Sketch how the error $E = \frac{1}{2}\sum (z_i - tz_i)^2$ changes from epoch to epoch.

Official Use Only

Header:	Name	Correct Date	Program Description
Style:	Comments	Variable Names	Modular
Data Structures:	Obvious	General	Lean
Algorithm:	Clear	Correct	Efficient
Scoring:	Raw _____	Late _____	Total _____