

Part 3

$$\frac{\partial E}{\partial W} = (z - t) z(1-z) + W$$

① $(.7020 - 0) \cdot .7020(1 - .7020) \cdot .05$

note 1 $.0072$

$$(.7020 - 0) \cdot .7020(1 - .7020) \cdot .40$$

note 2 $.0206$

$$= -0.0134$$

$$.7020(1 - .7020) = .20916$$

$$-0.0134 \cdot .20916 \cdot .15 = -0.0042048$$

Part 2

$$\frac{\partial E}{\partial W_3} = (z - t) z(1-z)$$

$$(.5934 - 0) \cdot .5934(1 - .5934)$$

$$.5934 \cdot (.5934)(.4066)$$

$$= .1431734$$

Part 4

BW1

$$\frac{\partial E}{\partial W_1} = (-.0134) \cdot .7020(1 - .7020)$$

$$= .0028$$