

EE 534 NUMERICAL METHODS IN ELECTROMAGNETICS
HW2

Date: 9.4.2015

Due: 15.4.2015

1) Obtain the electrostatic potential for the region $0 \leq x \leq 1$, $0 \leq y \leq 1$ with the B.C's:

$$V(x,1) = 45x(1-x)$$

$$V(x,0) = 0$$

$$V(0,y) = 0$$

$$V(1,y) = 0$$

Assume that $\Delta x = \Delta y = \frac{1}{4}$.

2) Use the grid indicated below to estimate the potential at point A.

