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PES71

ECE1395

Problem Set 3

1A)

```
Size of matrix X =  (100, 3)
Size of vector y =  (100, 1)
```

1D) The figure reaches 0.9 at 2.2.

1E)

```
cost of toy data is  [1.12692801]
```

1F)

```
Optimized values for theta =  [-26.66305581   0.22637894   0.20843114]
Cost of optimzed values =  [0.19837455]
```

1I)

```
Model accuracy =  0.9
The admission probability =  0.647182670742156
Student should be admitted
```

2A)

```
Thetas for homes versus profits =  [ 2.19257089e+05 -7.75887394e+02  1.06170516e+01]
```