

ECE 1395 Problem Set 3

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ps3-1-a.)

```
ps3-1-a.)
```

```
Size of X:
```

```
ans =
```

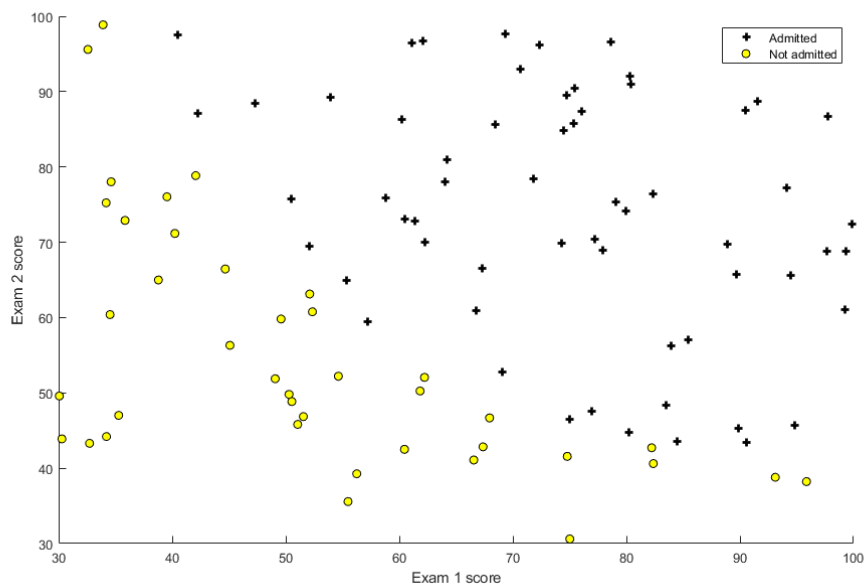
```
100      3
```

```
Size of y:
```

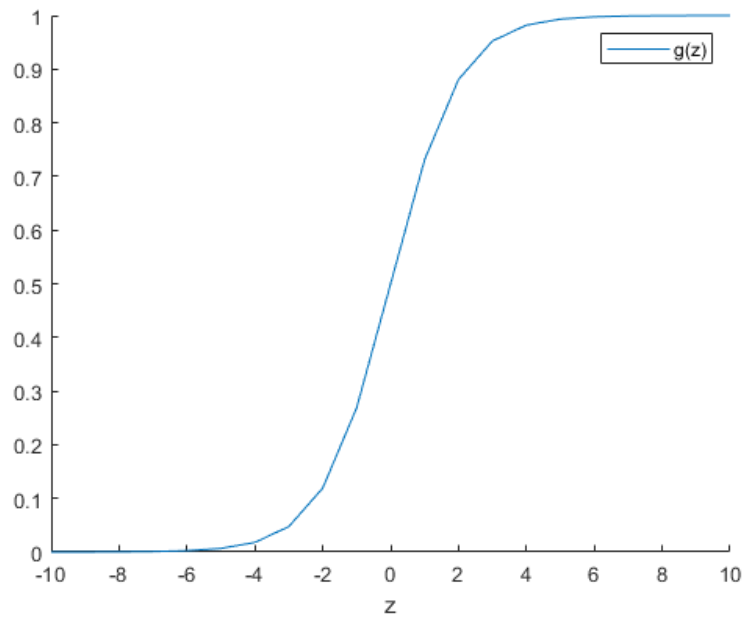
```
ans =
```

```
100      1
```

ps3-1-b.)



ps3-1-d.)



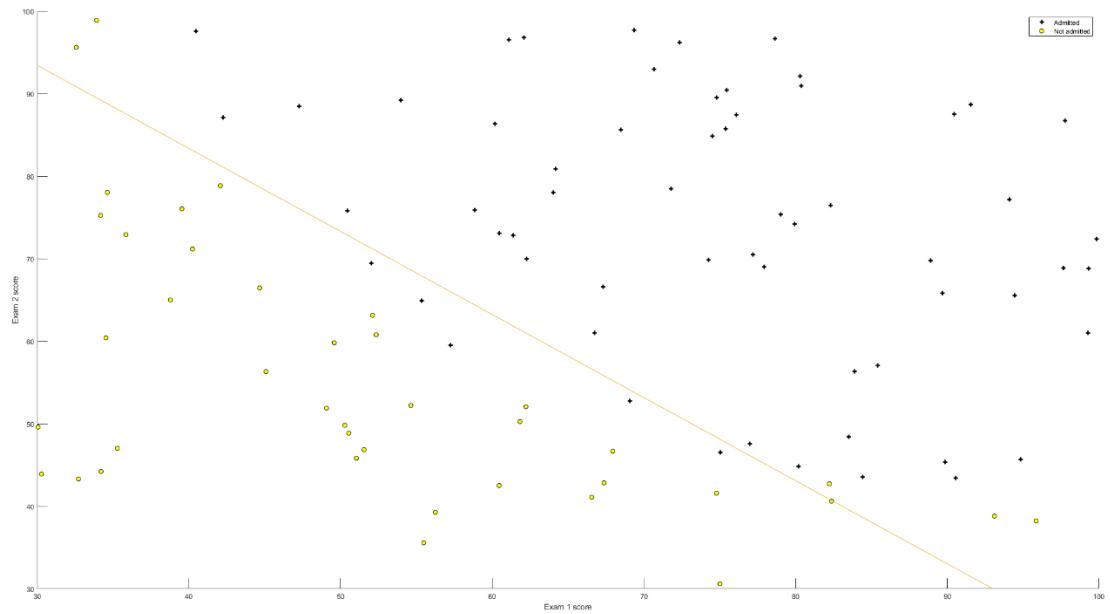
ps3-1-e.)

```
ps3-1-e.)  
Cost of toy data: 6.931472e-01
```

ps3-1-f.)

```
Cost of train data: 2.018925e-01  
Thetas  
traintheta =  
  
-25.5400  
0.2065  
0.2046
```

ps3-1-g.)



ps3-1-i.)

```
ps3-1-i.)  
Probability of admission: 5.328634e-01  
Admitted
```

ps3-2-a.)

```
ps3-2-a.)  
Thetas  
profitthetas =
```

```
1.0e+05 *
```

```
2.1879
```

```
-0.0077
```

```
0.0001
```

ps3-2-b.)

