a. 100x2: X, 100x1: y

e. J = 0.693147180559945

f. cost: 0.20026672

theta: -26.4419946668656

0.210317868600003

0.219205350393485

i. the probability of these scores seems to produce a 100% acceptance probability. This is due to the fact that the test scores with the theta values produce a g value of about .5. Although this is not well over the 0 boundary, it is over it, meaning that this student according to the data should be accepted to the school.

2. a) theta: -440942.736827946

1159.51393735936

9.25851505346817

Cost: 3.81848432

B)