

## Homework: Matrices IV

Due Tuesday, March 15th

- I. Do the matrix multiplication problems #7-10 on page 537. If it is impossible to multiply the given matrices, write a sentence explaining why.
- II. Read problem #49 on page 538. Do the following.
  - i. If you sell hamburgers at \$0.90 each, how much do you get if you sell 4000?
  - ii. If you sell 4000 hamburgers at \$0.90 each, 400 hot dogs for \$0.80 each and 700 milk shakes for \$1.10 each, how much money do you make? Write the calculation that you have to do to answer this question as a product of a  $1 \times 3$  matrix with a  $3 \times 1$  matrix.
  - iii. Do parts (a) and (b) of the problem.
- III. Do problem #51 on page 538. Answer part (b) by writing a few sentences explaining what each entry in the product matrix represents verbally.