AMSC/CMSC 460

Quiz 5

Fall 2001

Show all work. You may leave arithmetic expressions in any form that a calculator could evaluate. By putting your name on this paper, you agree to abide by the university's code of academic integrity in completing the quiz. Use no books, calculators, cellphones, communication with others, scratchpaper, etc.

Name \_\_\_\_\_

Student number \_\_\_\_\_

1a. (5) Compute the infinity-norm of the vector

 $\left[\begin{array}{c} -4\\2\\3 \end{array}\right].$ 

1b. (5) Compute the 1-norm of the matrix

$$\left[\begin{array}{ccc} 1 & 2 & 3 \\ -1 & 4 & 0 \\ 1 & 1 & -2 \end{array}\right].$$

2. (10) Write Matlab statements to compute the product of two matrices,  ${\tt A}$  and  ${\tt B}$ , using the "saxpy" formulation of taking a scalar times a vector and adding it to another vector.