CPSC 314, Worksheet 1 Name:_____ Student number: _____

due: Mon Sept 10, in class

1. Math review

$$a = \begin{bmatrix} 1 \\ -3 \\ 2 \end{bmatrix}, \; b = \begin{bmatrix} 2 \\ -1 \\ 4 \end{bmatrix}, \; C = \begin{bmatrix} -1 & 1 & 0 \\ 1 & 0 & 3 \\ 1 & 2 & 2 \end{bmatrix}, \; d = 2$$

For each of the following, compute the answer or, if it cannot be evaluated, state that it is a "nonsense" expression.

$b^T a$

$b\, a$

$a\, b^T$

$a^T b$

$a\, d$

$d\, C$

$b\, C$

$C\, a$

$b^T C\, a$

a^2

$C\, C^T$

$a \cdot b$