

Math 2311 Quiz #3

SPRING SEMESTER 2008

Name SOLUTIONS

1. Let $A = \begin{pmatrix} -2 & 3 & 5 \\ 1 & -2 & 0 \end{pmatrix}$ and $B = \begin{pmatrix} 2 & -3 & 1 \\ 6 & -5 & 1 \end{pmatrix}$. Compute and simplify $-2A + 3B$.

$$-2A + 3B = \begin{pmatrix} 10 & -15 & -7 \\ 16 & -11 & 3 \end{pmatrix}$$

2. Let $A = \begin{pmatrix} -1 & 2 & 3 \\ 1 & -2 & 1 \\ 0 & 1 & 2 \end{pmatrix}$ and $B = \begin{pmatrix} -5 & -1 & 8 \\ -2 & -2 & 4 \\ 1 & 1 & 0 \end{pmatrix}$. Compute and simplify AB .

$$AB = \begin{pmatrix} 4 & 0 & 0 \\ 0 & 4 & 0 \\ 0 & 0 & 4 \end{pmatrix}$$

3. Let $A = \begin{pmatrix} -1 & 2 & 4 & 3 \\ 0 & 4 & 2 & 7 \\ -1 & 0 & 2 & 3 \end{pmatrix}$ and $B = \begin{pmatrix} -1 & 2 \\ 3 & 1 \\ -1 & -4 \\ 2 & 1 \end{pmatrix}$. Compute and simplify AB .

$$AB = \begin{pmatrix} 9 & -13 \\ 24 & 3 \\ 5 & -7 \end{pmatrix}$$