Worksheet 2.4 – Adding and Subtracting Matrices – Textbook pages 86-91

LEVEL 1

1.) Can the following matrices be added together?   _____   Explain your answer below:

$$\begin{bmatrix} -2 & -3 \\ 3 & 5 \end{bmatrix} \text{ and } \begin{bmatrix} 4 & 1 & -6 \\ 2 & -6 & 0 \end{bmatrix}$$

LEVEL 2

2.) Add the matrices. Show a work matrix as well as a final answer matrix.

$$\begin{bmatrix} 6 & -1 & 4 \\ 1 & 3 & 4 \end{bmatrix} + \begin{bmatrix} 5 & 0 & 1 \\ 8 & -4 & 3 \end{bmatrix} =$$

LEVEL 3

3.) Subtract the matrices. Show a work matrix as well as a final answer matrix.

$$\begin{bmatrix} -6 & 2 \\ -3 & -8 \end{bmatrix} - \begin{bmatrix} -1 & 0 \\ 4 & 7 \end{bmatrix} =$$

4.) Find the sum and difference of these matrices. Show work matrices as well as final answer matrices.

$$\begin{bmatrix} -4 & 5 \\ 5 & -1 \end{bmatrix} \begin{bmatrix} -7 & 6 \\ -2 & -4 \end{bmatrix}$$

sum = _____   difference = _____