IGCSE – Matrices Paper 2&4 - 1

May 03 Paper 2

4 $\mathbf{a} = \begin{pmatrix} 2 \\ -3 \end{pmatrix}$ and $\mathbf{b} = \begin{pmatrix} 5 \\ -1 \end{pmatrix}$. Find $3\mathbf{a} - 2\mathbf{b}$.

Answer ( ) [2]

May 03 Paper 2

14 **(a)** Multiply $\begin{pmatrix} 5 & 4 \\ -3 & -2 \end{pmatrix}\begin{pmatrix} 2 & 1 & -4 \\ 0 & 3 & 6 \end{pmatrix}$.

Answer (a) ( ) [2]

(b) Find the inverse of $\begin{pmatrix} 5 & 4 \\ -3 & -2 \end{pmatrix}$.

Answer (b) ( ) [2]

May 04 Paper 4 11

22 $\mathbf{A} = (5 \ -8)$ $\mathbf{B} = \begin{pmatrix} 2 & 6 \\ 5 & -4 \end{pmatrix}$ $\mathbf{C} = \begin{pmatrix} 4 & 6 \\ 5 & -2 \end{pmatrix}$ $\mathbf{D} = \begin{pmatrix} 4 \\ -2 \end{pmatrix}$

(a) Which one of the following matrix calculations is **not** possible?

(i) **AB** **(ii)** **AD** **(iii)** **BA** **(iv)** **DA**

Answer(a) ..... [2]

(b) Calculate **BC**.

Answer(b) **BC** = ( ) [2]

(c) Use your answer to **part (b)** to write down $\mathbf{B}^{-1}$, the inverse of **B**.

Answer(c) $\mathbf{B}^{-1}$ = ( ) [1]