

Name \_\_\_\_\_

Date \_\_\_\_\_

Year Group \_\_\_\_\_

**Match the following matrices with the correct label**

$$A = \begin{bmatrix} 1 & 2 \\ 4 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 3 & 7 \end{bmatrix} \quad C = \begin{bmatrix} 1 & 2 \\ 5 & 3 \\ 4 & 6 \end{bmatrix} \quad D = \begin{bmatrix} 1 \\ 3 \end{bmatrix} \quad E = \begin{bmatrix} 1 & 9 \end{bmatrix}$$

1.  $1 \times 2 =$  \_\_\_\_\_    2.  $2 \times 1 =$  \_\_\_\_\_    3.  $2 \times 2 =$  \_\_\_\_\_

4.  $2 \times 3 =$  \_\_\_\_\_    5.  $3 \times 2 =$  \_\_\_\_\_

**Use the following matrix to answer the questions below**

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

6. What is the element of  $a_{1,2}$ ?    Answer = \_\_\_\_\_

7. What is the element of  $a_{2,3}$ ?    Answer = \_\_\_\_\_

8. What is the element of  $a_{3,2}$ ?    Answer = \_\_\_\_\_

**Use the following matrices to answer the questions below**

$$A = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 1 \\ 5 \\ 7 \end{bmatrix} \quad C = \begin{bmatrix} 1 & 2 \\ 4 & 3 \end{bmatrix} \quad D = \begin{bmatrix} 1 & 2 \\ 5 & 3 \\ 4 & 6 \end{bmatrix}$$

9. We want to multiply two matrices and if our first matrix is  $2 \times 3$ , how many of the matrices above can be our second matrix?

Answer = \_\_\_\_\_

10. We want to add two matrices and if our first matrix is  $3 \times 2$ , how many of the matrices above can be our second matrix?

Answer = \_\_\_\_\_