

$$x = -8 \quad y = -8$$

Work out the values of x and y

$$\begin{bmatrix} x & -8 \\ -2 & -1 \end{bmatrix} \begin{bmatrix} -4 & -5 \\ x & y \end{bmatrix} = \begin{bmatrix} -96 & -72 \\ 0 & 6 \end{bmatrix}$$



$$\begin{bmatrix} -5 & 4 \\ -5 & 4 \end{bmatrix}$$

Work out the values of x and y

$$\begin{bmatrix} 6 & 1 \\ 1 & -8 \end{bmatrix} \begin{bmatrix} -3 & -8 \\ x & y \end{bmatrix} = \begin{bmatrix} -22 & -56 \\ 29 & 56 \end{bmatrix}$$



$$x = 1 \quad y = -4$$

Given that $\mathbf{A} = \begin{bmatrix} -6 & -2 \\ -3 & -4 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 1 & 2 \\ -1 & 2 \end{bmatrix}$

calculate the product \mathbf{AB}



Matrices - multiplication (2)

$$\begin{bmatrix} -4 & -16 \\ 1 & -14 \end{bmatrix}$$

Given that $\mathbf{A} = \begin{bmatrix} 0 & -1 \\ 0 & -1 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} -4 & -3 \\ 5 & -4 \end{bmatrix}$

calculate the product \mathbf{AB}



$$\begin{bmatrix} -47 & -9 \\ -58 & -6 \end{bmatrix}$$

Work out the values of x and y

$$\begin{bmatrix} x & -9 \\ -3 & 1 \end{bmatrix} \begin{bmatrix} 4 & -3 \\ x & y \end{bmatrix} = \begin{bmatrix} -25 & -6 \\ -7 & 8 \end{bmatrix}$$



$$x = 6 \quad y = 2$$

Work out the values of x and y

$$\begin{bmatrix} 3 & 6 \\ 3 & 6 \end{bmatrix} \begin{bmatrix} -8 & 2 \\ x & y \end{bmatrix} = \begin{bmatrix} 0 & -18 \\ 0 & -18 \end{bmatrix}$$



$$x = 5 \quad y = -1$$

Given that $\mathbf{A} = \begin{bmatrix} -2 & -7 \\ 7 & -6 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 3 & 0 \\ 4 & 6 \end{bmatrix}$

calculate the product \mathbf{AB}



$$x = -4 \quad y = 1$$

Given that $\mathbf{A} = \begin{bmatrix} 7 & 3 \\ 8 & 2 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} -8 & 0 \\ 3 & -3 \end{bmatrix}$

calculate the product \mathbf{AB}



$$x = 7 \quad y = 7$$

Work out the values of x and y

$$\begin{bmatrix} -7 & -9 \\ -2 & 5 \end{bmatrix} \begin{bmatrix} y & x \\ x & y \end{bmatrix} = \begin{bmatrix} -44 & -20 \\ 48 & -36 \end{bmatrix}$$



$$x = -8 \quad y = -7$$

Work out the values of x and y

$$\begin{bmatrix} -4 & 8 \\ 6 & -7 \end{bmatrix} \begin{bmatrix} 5 & -9 \\ x & y \end{bmatrix} = \begin{bmatrix} -12 & 4 \\ 23 & -26 \end{bmatrix}$$



$$\begin{bmatrix} 52 & -32 \\ -66 & -24 \end{bmatrix}$$

Work out the values of x and y

$$\begin{bmatrix} x & 6 \\ 2 & 8 \end{bmatrix} \begin{bmatrix} 7 & 7 \\ x & y \end{bmatrix} = \begin{bmatrix} -104 & -98 \\ -50 & -42 \end{bmatrix}$$



$$x = 4 \quad y = 4$$

Work out the values of x and y

$$\begin{bmatrix} -4 & 4 \\ -7 & -6 \end{bmatrix} \begin{bmatrix} -7 & 1 \\ x & y \end{bmatrix} = \begin{bmatrix} 56 & 24 \\ 7 & -49 \end{bmatrix}$$



$$x = 3 \quad y = 6$$

Work out the values of x and y

$$\begin{bmatrix} -6 & -5 \\ 2 & -1 \end{bmatrix} \begin{bmatrix} 2 & -6 \\ x & y \end{bmatrix} = \begin{bmatrix} 28 & 76 \\ 12 & -4 \end{bmatrix}$$



$$\begin{bmatrix} -34 & -42 \\ -3 & -36 \end{bmatrix}$$

Work out the values of x and y

$$\begin{bmatrix} -3 & -6 \\ 4 & -9 \end{bmatrix} \begin{bmatrix} y & x \\ x & y \end{bmatrix} = \begin{bmatrix} -48 & -42 \\ -38 & -12 \end{bmatrix}$$



$$x = 6 \quad y = 4$$

Work out the values of x and y

$$\begin{bmatrix} -4 & 5 \\ -9 & -8 \end{bmatrix} \begin{bmatrix} y & x \\ x & y \end{bmatrix} = \begin{bmatrix} 24 & -21 \\ -23 & -28 \end{bmatrix}$$



$$x = 8 \quad y = -4$$

Given that $\mathbf{A} = \begin{bmatrix} -9 & -1 \\ 2 & 8 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} -5 & 4 \\ -7 & -4 \end{bmatrix}$

calculate the product \mathbf{AB}



$$x = 4 \quad y = -1$$

Work out the values of x and y

$$\begin{bmatrix} -8 & 1 \\ 8 & -1 \end{bmatrix} \begin{bmatrix} y & x \\ x & y \end{bmatrix} = \begin{bmatrix} -45 & -18 \\ 45 & 18 \end{bmatrix}$$



$$x = 8 \quad y = 4$$

Work out the values of x and y

$$\begin{bmatrix} x & 7 \\ 4 & 1 \end{bmatrix} \begin{bmatrix} -4 & -6 \\ x & y \end{bmatrix} = \begin{bmatrix} 12 & 4 \\ -12 & -20 \end{bmatrix}$$



$$x = 4 \quad y = -4$$

Work out the values of x and y

$$\begin{bmatrix} x & -7 \\ -8 & -5 \end{bmatrix} \begin{bmatrix} 1 & 1 \\ x & y \end{bmatrix} = \begin{bmatrix} 24 & -11 \\ 12 & -13 \end{bmatrix}$$



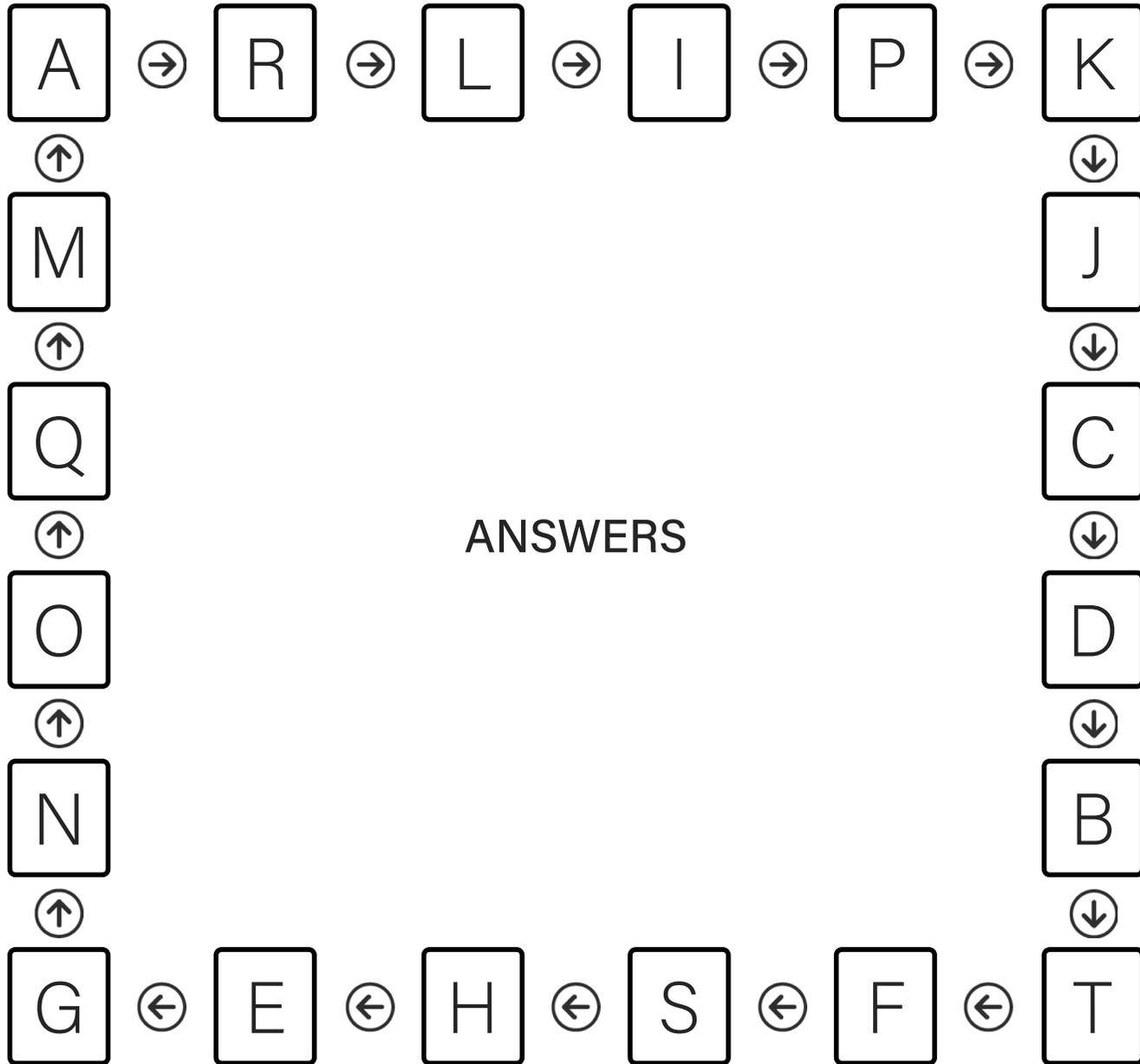
$$x = -4 \quad y = -8$$

Work out the values of x and y

$$\begin{bmatrix} -2 & 5 \\ 4 & -9 \end{bmatrix} \begin{bmatrix} y & x \\ x & y \end{bmatrix} = \begin{bmatrix} 26 & -2 \\ -46 & 6 \end{bmatrix}$$



Matrices - multiplication (2)



ANSWERS