

# Write a column vector from a diagram

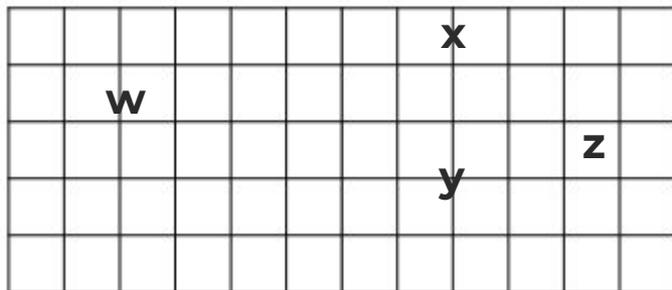
Maths

Miss Davies



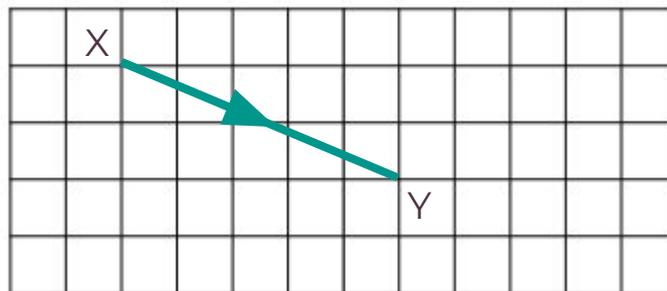
## Write a column vector from a diagram

1. Vectors **w**, **x**, **y** and **z** are drawn on the grid.



- Write **w** as a column vector.
- Write **x** as a column vector.
- Write **y** as a column vector.
- Write **z** as a column vector.

2. Imran says that vector  $\overrightarrow{XY}$  is  $\begin{pmatrix} -2 \\ 5 \end{pmatrix}$ .

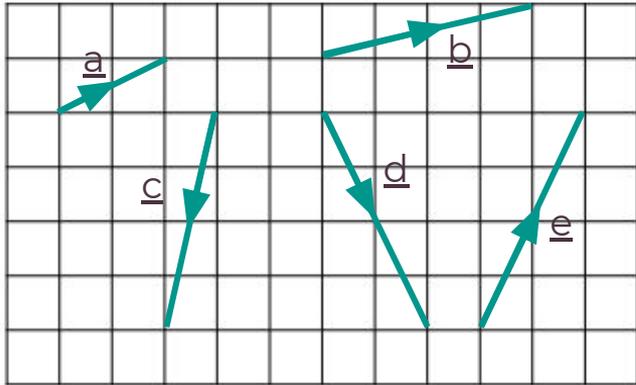


- What mistake has Imran made?
- What is the correct answer for vector  $\overrightarrow{XY}$ ?



# Write a column vector from a diagram

3. Use the grid to match up the cards.



$$\begin{pmatrix} 2 \\ 1 \end{pmatrix}$$

$$\begin{pmatrix} -1 \\ -4 \end{pmatrix}$$

$$\begin{pmatrix} 4 \\ 1 \end{pmatrix}$$

$$\begin{pmatrix} 2 \\ -4 \end{pmatrix}$$

$$\begin{pmatrix} 2 \\ 4 \end{pmatrix}$$

a

b

c

d

e

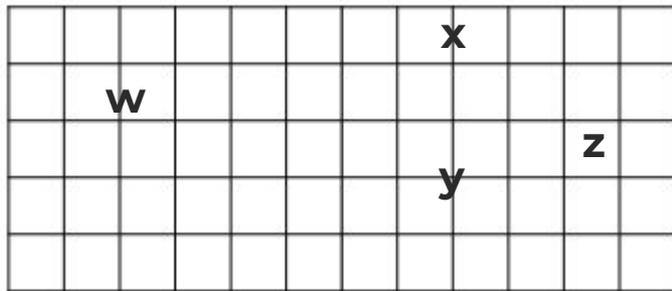


# Answers



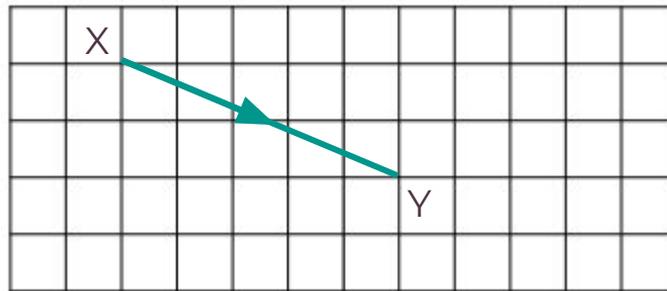
# Write a column vector from a diagram

1. Vectors **w**, **x**, **y** and **z** are drawn on the grid.



- a) Write **w** as a column vector.  $\begin{pmatrix} 3 \\ 2 \end{pmatrix}$
- b) Write **x** as a column vector.  $\begin{pmatrix} 2 \\ 0 \end{pmatrix}$
- c) Write **y** as a column vector.  $\begin{pmatrix} -3 \\ 3 \end{pmatrix}$
- d) Write **z** as a column vector.  $\begin{pmatrix} 0 \\ 3 \end{pmatrix}$

2. Imran says that vector  $\overrightarrow{XY}$  is  $\begin{pmatrix} -2 \\ 5 \end{pmatrix}$ .

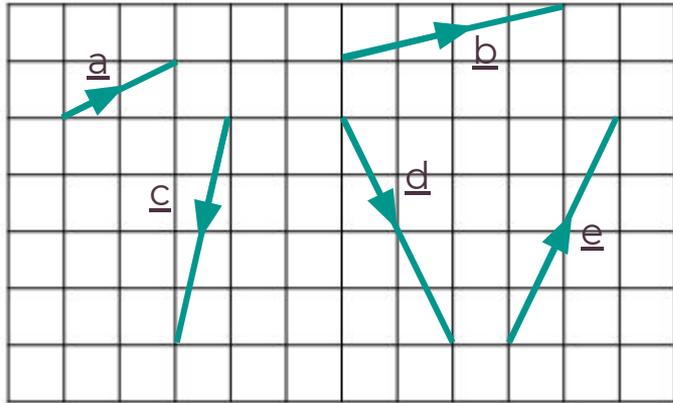


- a) What mistake has Imran made?  
He has got the vertical and horizontal parts the wrong way round.
- b) What is the correct answer for vector  $\overrightarrow{XY}$ ?  $\begin{pmatrix} 5 \\ -2 \end{pmatrix}$



# Write a column vector from a diagram

3. Use the grid to match up the cards.



<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>
$\begin{pmatrix} 2 \\ 1 \end{pmatrix}$	$\begin{pmatrix} 4 \\ 1 \end{pmatrix}$	$\begin{pmatrix} -1 \\ -4 \end{pmatrix}$	$\begin{pmatrix} 2 \\ -4 \end{pmatrix}$	$\begin{pmatrix} 2 \\ 4 \end{pmatrix}$

