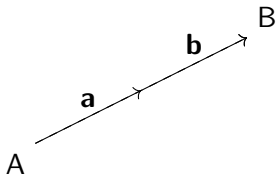


Year 10 Vector Starters

Starter 1

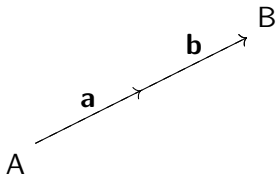
1. Start with zero, add 7, subtract 10, add 6, subtract 3, what is the result?
2. What if you started with -5 ?
3. Add: $\begin{pmatrix} 4 \\ 1 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix}$



4. Find: $-\begin{pmatrix} 5 \\ 2 \end{pmatrix}$
5. What column vector represents the reverse of the following vector:
 $\begin{pmatrix} 3 \\ -4 \end{pmatrix}$?
6. Write an expression in terms of **a** and **b** that represents the whole journey from A to B.
7. Which vector would undo that journey? How many different ways can you write it?

Starter 1

1. Start with zero, add 7, subtract 10, add 6, subtract 3, what is the result? **0**
2. What if you started with -5 ? **-5**
3. Add: $\begin{pmatrix} 4 \\ 1 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix}$ **$\begin{pmatrix} 6 \\ 4 \end{pmatrix}$**



4. Find: $-\begin{pmatrix} 5 \\ 2 \end{pmatrix}$ **$\begin{pmatrix} -5 \\ -2 \end{pmatrix}$**
5. What column vector represents the reverse of the following vector:
 $\begin{pmatrix} 3 \\ -4 \end{pmatrix}$? **$\begin{pmatrix} -3 \\ 4 \end{pmatrix}$**
6. Write an expression in terms of **a** and **b** that represents the whole journey from A to B.
 $a + b$
7. Which vector would undo that journey? How many different ways can you write it?

$$\overrightarrow{BA} = -(\overrightarrow{a} + \overrightarrow{b}) = -\overrightarrow{a} - \overrightarrow{b}$$