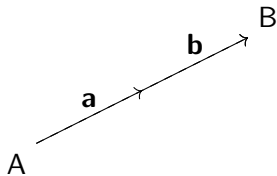


Year 10 Vector Retrieve and Connects

Retrieve and Connect

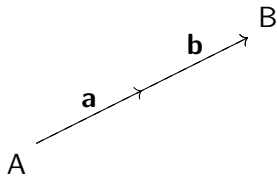
1. Start with zero, add 7, subtract 10, add 6, subtract 3, what is the result?
2. What if you started with -5 ?
3. Add: $\begin{pmatrix} 4 \\ 1 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix}$



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?

Retrieve and Connect

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?

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