

Column Vectors

Week 6

Lesson Time : 10-15 Minutes
Course : Foundation or Higher
Grade : 5

Back to Basics**Core****Let's Do It!**

GCSE Revision Video 27

- **Prior Checklist:** A pack of A5/A6 revision cards.

A pen.

- **Our Video Structure:**

Back to Basics: Quick re-cap.

Core: *Create* your own revision cards with exam style questions.

Let's Do It! : *Apply* your revision cards to another set of exam style questions.

Instructions: **Print out** this worksheet and watch the revision video simultaneously.

Pause and Play the video unlimited times to review your work and write the answers in the blank spaces. Once you have written your answers, check these with the tutorial answers, as explained in the video.

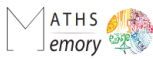
Create your OWN revision cards when prompted on the worksheet(Back to Basic and Core sections).

Apply your OWN revision cards (Let's Do It! section).

Self Assess yourself (Out of 10) on your revision planner after you have completed the revision video

WATCH this revision video and **MANY** others on our **FULL** courses at www.mathsmemory.co.uk

Let's get started and create our Master revision card with this suggested template.



Maths Memory

Learn:

- Add/Subtract vectors
- Multiply vectors
- Show graphically

Topic: Column Vectors

Date/week: _____

Step 3

Step 2

Step 1

Example(s):

GRADE

5

Back to Basics- Starter questions to warm you up

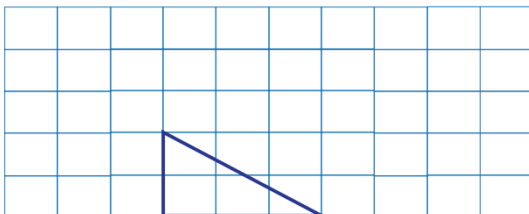


Back to Basics

Topic: Column Vectors

Question 1

Translate this shape with column vector $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$



Core- Create your revision cards with these exam style questions



Core 1

Topic: Column Vectors

Question 1

a)

$$a = \begin{pmatrix} 4 \\ 1 \end{pmatrix} \quad b = \begin{pmatrix} -2 \\ 3 \end{pmatrix}$$

Work out $3a + b$ as a column vector.

b)

$$a = \begin{pmatrix} 3 \\ -2 \end{pmatrix} \quad b = \begin{pmatrix} -1 \\ 4 \end{pmatrix}$$

Work out $2a - 3b$ as a column vector.

Grade

5 (4 Marks)

Let's get our revision card and create Section A. Look at video for guidance.

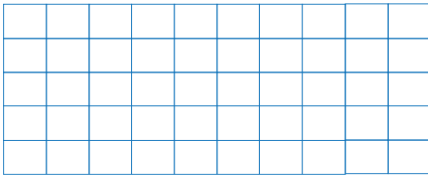
Let's get our revision card and create Section B. Look at video for guidance.



Question 2

$$a = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \quad b = \begin{pmatrix} 2 \\ -2 \end{pmatrix}$$

On the grid below, draw and label the vector
 $2a - 3b$



Grade

5 (2 Marks)

Let's Do It!- Apply your revision cards to another set of exam style questions

Question 1

a)

$$a = \begin{pmatrix} 2 \\ 1 \end{pmatrix} \quad b = \begin{pmatrix} 3 \\ -2 \end{pmatrix}$$

Work out $2a + b$ as a column vector.

b)

$$a = \begin{pmatrix} -3 \\ 2 \end{pmatrix} \quad b = \begin{pmatrix} 1 \\ -4 \end{pmatrix}$$

Work out $3a - 2b$ as a column vector.

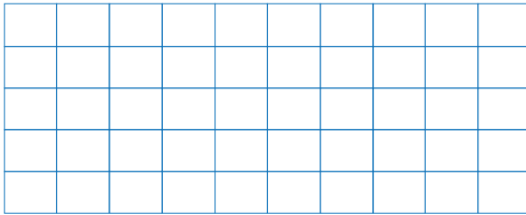
Grade

5 (4 Marks)

Question 2

$$a = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \quad b = \begin{pmatrix} -1 \\ 1 \end{pmatrix}$$

On the grid below, draw and label the vector
 $a - 3b$



Grade

5 (2 Marks)

Congratulations. You have completed this topic.

Now go back to your revision planner and rate yourself out of 10.