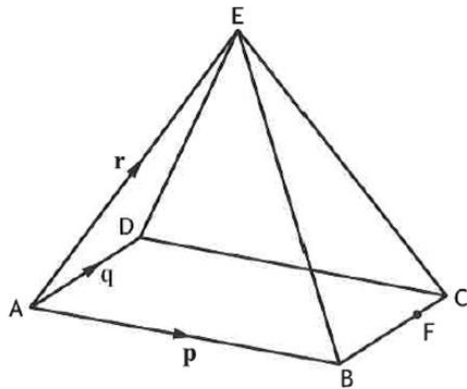


SQA Past paper questions

2019 - Paper 2 - Question 3

E,ABCD is a rectangular based pyramid.

$\vec{AB} = \mathbf{p}$, $\vec{AD} = \mathbf{q}$ and $\vec{AE} = \mathbf{r}$.



- (a) Express $\vec{BE}$ in terms of $\mathbf{p}$ and $\mathbf{r}$. 1

Point F divides BC in the ratio 3:1.

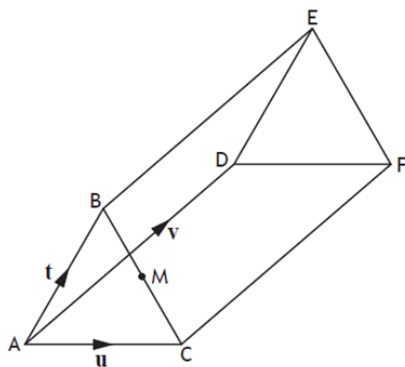
- (b) Express vector $\vec{EF}$ in terms of $\mathbf{p}$, $\mathbf{q}$ and $\mathbf{r}$. 2

Click [here](#) for video solution. 

2018 - Paper 1 - Question 9

The diagram shows a triangular prism ABC,DEF.

$\vec{AB} = \mathbf{t}$, $\vec{AC} = \mathbf{u}$ and $\vec{AD} = \mathbf{v}$.



- (a) Express $\vec{BC}$ in terms of $\mathbf{u}$ and $\mathbf{t}$. 1

M is the midpoint of BC.

- (b) Express $\vec{MD}$ in terms of $\mathbf{t}$, $\mathbf{u}$ and $\mathbf{v}$. 2

Click [here](#) for video solution. 

2016 - Paper 1 - Question 7

Three vectors can be expressed as follows:

$$\vec{FG} = -2\mathbf{i} - 6\mathbf{j} + 3\mathbf{k}$$

$$\vec{GH} = 3\mathbf{i} + 9\mathbf{j} - 7\mathbf{k}$$

$$\vec{EH} = 2\mathbf{i} + 3\mathbf{j} + \mathbf{k}$$

(a) Find $\vec{FH}$. 2

(b) Hence, or otherwise, find $\vec{FE}$. 2

Click [here](#) for video solution. 