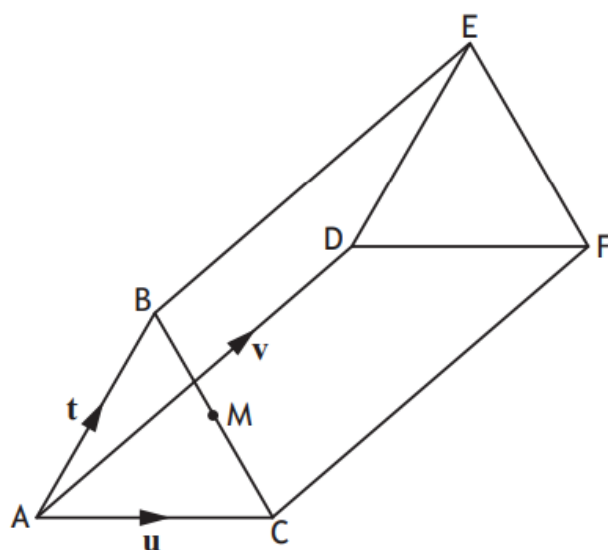


Higher Maths
SQA 2018 Paper 1
Question 9



The diagram shows a triangular prism ABC,DEF.

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



(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

Answers:

(a) $-\mathbf{t} + \mathbf{u}$

(b) $-\frac{1}{2}\mathbf{t} - \frac{1}{2}\mathbf{u} + \mathbf{v}$