

Higher Maths
SQA 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
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Answers:

(a) $\mathbf{i} + 3\mathbf{j} - 4\mathbf{k}$

(b) $-\mathbf{i} - 5\mathbf{k}$