

The diagram shows a solid figure OABCDEF having a horizontal rectangular base OABC with OA = 6 units and AB = 3 units. The vertical edges OF, AD and BE have lengths 6 units, 4 units and 4 units respectively. Unit vectors \mathbf{i} , \mathbf{j} and \mathbf{k} are parallel to OA, OC and OF respectively.

(i)	Find \overline{DF} .	[1]
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(ii)	Find the unit vector in the direction of \overrightarrow{EF} .	[3]
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[4]	roduct to find angle <i>EFD</i> .	ose a scarar