

MARKS

3. The coordinates of points D, E and F are given by D (2, -3, 4), E (1, 1, -2) and F (3, 2, 1).

(a) Express \overrightarrow{ED} and \overrightarrow{EF} in component form.

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(b) (i) Calculate $\overrightarrow{ED} \cdot \overrightarrow{EF}$.

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(ii) Hence, or otherwise, calculate the size of angle DEF.

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