

Question	Scheme	Marks	AOs
2 (a)	$\overline{AB} = \overline{OB} - \overline{OA} = 6\mathbf{i} - 3\mathbf{j} - (4\mathbf{i} + 2\mathbf{j})$	M1	1.1b
	$= 2\mathbf{i} - 5\mathbf{j}$	A1	1.1b
		(2)	
1(b)	Explains that \overline{OC} is parallel to \overline{AB} as $8\mathbf{i} - 20\mathbf{j} = 4 \times (2\mathbf{i} - 5\mathbf{j})$	M1	1.1b
	As $\overline{OC} = 4 \times \overline{AB}$ it is parallel to it and not the same length Hence $OABC$ is a trapezium.	A1	2.4
		(2)	

(4 marks)

Notes:

(a)

M1: Attempts $\overline{AB} = \overline{OB} - \overline{OA}$ or equivalent. This may be implied by one correct component

A1: $2\mathbf{i} - 5\mathbf{j}$

(b)

M1: Attempts to compare vectors \overline{OC} and \overline{AB} by considering their directions

A1: Fully explains why $OABC$ is a trapezium. (The candidate is required to state that OC is parallel to AB but not the same length as it.)