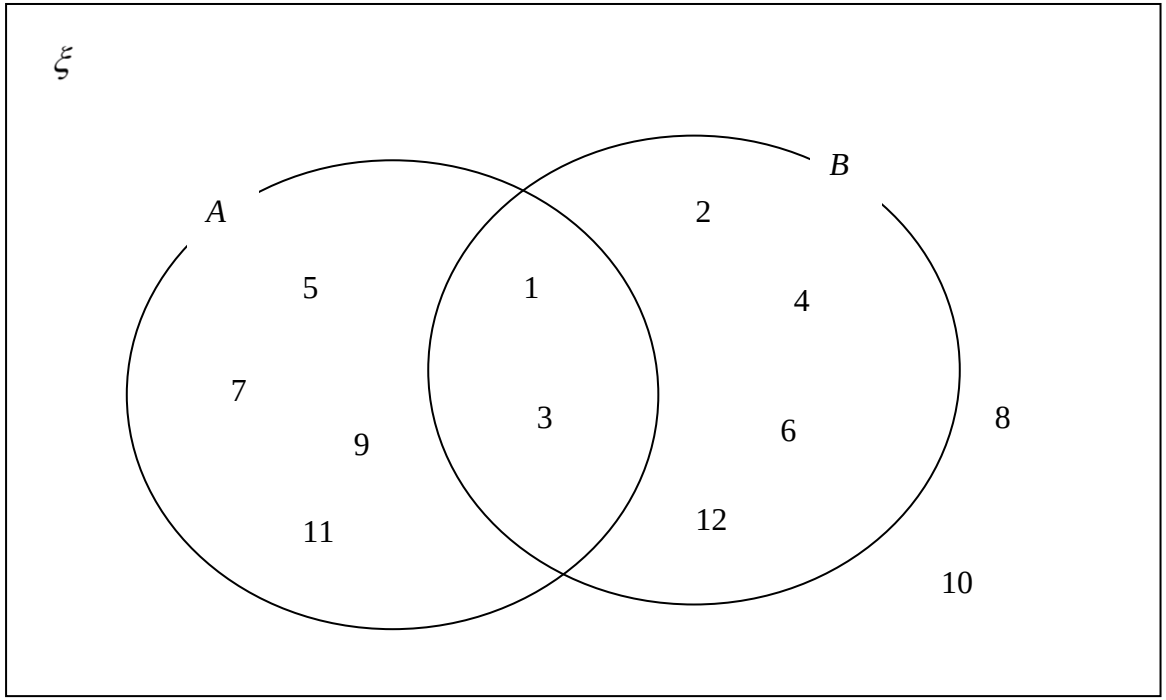
Question	Working	Answer	Mark	Notes
23	e.g. $\overrightarrow{AB} = \overrightarrow{AD} + \overrightarrow{DB}$ or $\begin{pmatrix} 2 \\ -3 \end{pmatrix} + \begin{pmatrix} -1 \\ 7 \end{pmatrix}$			M1 for a correct vector equation for $\overrightarrow{AB}$
	$\overrightarrow{AB} = \begin{pmatrix} 1 \\ 4 \end{pmatrix}$			A1
	$\overrightarrow{DC} = 3 \times \begin{pmatrix} 1 \\ 4 \end{pmatrix} \left(= \begin{pmatrix} 3 \\ 12 \end{pmatrix} \right)$			M1
	$\overrightarrow{BC} = \begin{pmatrix} 1 \\ -7 \end{pmatrix} + \begin{pmatrix} 3 \\ 12 \end{pmatrix} \left(= \begin{pmatrix} 4 \\ 5 \end{pmatrix} \right)$ oe **or**			M1
	$\overrightarrow{BC} = \begin{pmatrix} -1 \\ -4 \end{pmatrix} + \begin{pmatrix} 2 \\ -3 \end{pmatrix} + \begin{pmatrix} 3 \\ 12 \end{pmatrix} \left(= \begin{pmatrix} 4 \\ 5 \end{pmatrix} \right)$ oe			
		$\sqrt{41}$ cao	5	A1 No isw

4



6b

