7			Allow without arrows or squiggles throughout				
7	**(i)**	**(a)**	**c – a** oe	**B1** **[1]**	**1.2**		

Question			Answer	Mks	AO	Guidance	
7	(i)	(b)	$\mathbf{a} + \frac{1}{2}(\mathbf{c} - \mathbf{a})$ or $\mathbf{c} + \frac{1}{2}(\mathbf{a} - \mathbf{c})$	M1	3.1a	$\mathbf{a} + \frac{1}{2}$ their (a) or $\mathbf{c} - \frac{1}{2}$ their (a)	
			$= \frac{1}{2}(\mathbf{a} + \mathbf{c})$ or $\frac{1}{2}\mathbf{a} + \frac{1}{2}\mathbf{c}$	A1 [2]	1.1b	Correct ans without wking: M1A1	
	(ii)		$\overrightarrow{OB} = (\mathbf{a} + \mathbf{c})$	M1	3.1a	$\overrightarrow{PB} = \mathbf{a} + \frac{1}{2}(\mathbf{c} - \mathbf{a})$ or $\mathbf{a} + \frac{1}{2}$ their (i)(a) or $\mathbf{c} + \frac{1}{2}(\mathbf{a} - \mathbf{c})$ $(= \frac{1}{2}(\mathbf{a}+\mathbf{c})$ oe), ft their (i)(a) **NB** $\overrightarrow{PB} = \frac{1}{2}(\mathbf{a} + \mathbf{c})$ without justification: M0A0A0E0	or $\overrightarrow{PB} = \mathbf{c} - \frac{1}{2}$ their (i)(a)
			$\Rightarrow \overrightarrow{OP} = \frac{1}{2}\overrightarrow{OB}$ Must see previous line	A1*	1.1	$\Rightarrow \overrightarrow{PB} = \overrightarrow{OP}$	or similar with $\overrightarrow{BP}$ or $\overrightarrow{BO}$
			$\Rightarrow P$ is midpt of OB or OPB is a straight line and $OP = PB$	dep* A1	2.1		
			Hence diagonals of //m bisect one another	E1 [4]	2.2a	dep M1A1A1	