

Question	Scheme	Marks	AOs
<b>3(a)</b>	Attempts $\overrightarrow{AB} = \overrightarrow{OB} - \overrightarrow{OA}$ or similar	M1	1.1b
	$\overrightarrow{AB} = 5\mathbf{i} + 10\mathbf{j}$	A1	1.1b
		(2)	
<b>(b)</b>	Finds length using 'Pythagoras' $ AB  = \sqrt{(5)^2 + (10)^2}$	M1	1.1b
	$ AB  = 5\sqrt{5}$	A1ft	1.1b
		(2)	

**(4 marks)**

**Notes:**

- (a)**  
**M1:** Attempts subtraction but may omit brackets  
**A1:** cao (allow column vector notation)

- (b)**  
**M1:** Correct use of Pythagoras theorem or modulus formula using their answer to (a)  
**A1ft:**  $|AB| = 5\sqrt{5}$  ft from their answer to (a)

*Note that the correct answer implies M1A1 in each part of this question*