International GCSE Further Pure Mathematics – Paper 2R mark scheme

Question number	Scheme	Marks
1(a)	$\underset{OB}{\rightarrow} = \underset{OA}{\rightarrow} + \underset{AB}{\rightarrow}$ or $6\mathbf{i} + 8\mathbf{j} = \underset{OB}{\rightarrow} - (3\mathbf{i} - 2\mathbf{j})$ oe $9\mathbf{i} + 6\mathbf{j}$	M1 A1 [2]
(b)	$\sqrt{6^2 + 8^2}$ *or* 10 (from Pythagorean triple)	B1 [1]
(c)	$(\pm)\frac{1}{"10"}(6\mathbf{i} + 8\mathbf{j})$	M1 A1 [2]
		Total 5 marks

Part	Mark	Additional Guidance
(a)	M1	Correct vector path written, can be implied by correct addition of vectors OR correct vector statement together with correct substitution of the given vectors (where $\underset{OB}{\rightarrow}$ is not the subject)
	A1	$9\mathbf{i} + 6\mathbf{j}$
(b)	B1	Need not be simplified
(c)	M1	Correctly uses their magnitude from part (b)
	A1	Correct vector Penalise column vector notation for answer first time only