Question 1 (Total 3 marks)

Part	Working or answer an examiner might expect to see	Mark	Notes
	$2^y \times (2^5)^x = 2^{-3} \times 2^{-\frac{1}{2}} \Rightarrow 2^{5x+y} = 2^{-\frac{7}{2}}$	M1	This mark is given for writing all terms in the same base and applying an index law
	$5x + y = -\dfrac{7}{2}$	M1	This mark is given for writing an equation to link x and y
	$y = -5x - \dfrac{7}{2}$	A1	This mark is given for rearranging to find a correct expression of y as a function of x