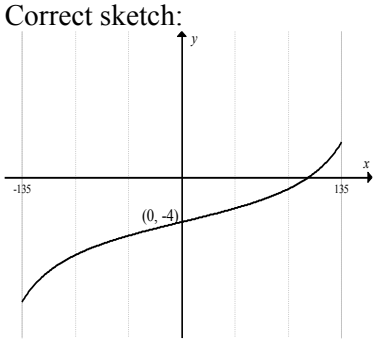
Question	Answer	Marks	Partial Marks
5(a)	$\frac{\sqrt{128}}{\sqrt{72}}=\frac{\sqrt{64\times2}}{\sqrt{36\times2}}$ or simplifies $\sqrt{\frac{128}{72}}$ to $\sqrt{\frac{16}{9}}$	**M1**	
	correct completion to $\frac{4}{3}$	**A1**	
5(b)	$\frac{3+2\sqrt{3}-\sqrt{3}\left(1+\sqrt{3}\right)}{\left(1+\sqrt{3}\right)\left(3+2\sqrt{3}\right)}$	**M1**	
	$\frac{\sqrt{3}}{3+2\sqrt{3}+3\sqrt{3}+6}$	**M1**	
	$\frac{\sqrt{3}}{9+5\sqrt{3}}\times\frac{9-5\sqrt{3}}{9-5\sqrt{3}}$	**M1**	
	$\frac{9\sqrt{3}-15}{6}$ or equivalent	**A1**	
			Alternative method **M1** for $\frac{1-\sqrt{3}}{(1+\sqrt{3})(1-\sqrt{3})}-\frac{\sqrt{3}(3-2\sqrt{3})}{(3+2\sqrt{3})(3-2\sqrt{3})}$
			M1 for $\frac{1-\sqrt{3}}{1-3}-\frac{3\sqrt{3}-6}{9-12}$
			M1 for writing with a common denominator
			A1 for $\frac{9\sqrt{3}-15}{6}$ or equivalent
6(a)	$a=20$ $b=2$ $c=-3$	**B3**	**B1** for each
6(b)	Correct sketch: 	**B2**	**B1** for correct tan shape with one continuous section only **B1** for correct y-intercept (0, –4)