

Q	Marking instructions	AO	Marks	Typical solution
8(a)	Sketches a branch of the curve with correct shape in 1 st or 2 nd quadrant with correct asymptotes and not touching the axes	1.2	M1	
	Sketches a fully correct curve with correct asymptotes and not touching the axes	1.1b	A1	
Subtotal			2	

Q	Marking instructions	AO	Marks	Typical solution
8(b)	Describes a stretch of scale factor 3 or 9 in either direction	2.4	M1	The curve can be stretched in the y -direction by a scale factor of 9
	Explains that the curve can be stretched in the y -direction by a scale factor of 9 Scale factor PI by $9f(x)$ OR Explains that the curve can be stretched in the x -direction by a scale factor of 3 Scale factor PI by $f\left(\frac{x}{3}\right)$	2.4	A1	The curve can be stretched in the x -direction by a scale factor of 3 Beth and Paul are both correct.
	Explains that the curve can be stretched in the y -direction by a scale factor of 9 PI by $9f(x)$ AND Explains that the curve can be stretched in the x -direction by a scale factor of 3 PI by $f\left(\frac{x}{3}\right)$ AND Concludes both are correct	2.2a	R1	
Subtotal			3	

Question 8 Total			5	
-------------------------	--	--	----------	--