

Question number	Scheme				Marks
9 (a)	-0.5	0.5	1.5		B1 B1
	0.70	0.92	2.11		[2]
(b)	Points plotted				B1ft
	Joined with a smooth curve				B1ft [2]
(c)	$x^3 + 4 = x^2 - 8x + 15$				M1
	$x^3 + 4 = (x - 5)(x - 3)$ oe				M1
	$\frac{x^3 + 4}{5 - x} = 3 - x$				A1
	$y = 3 - x$ drawn				M1
	$x = 1.3/1.4$				A1 [5]
ALT	$\frac{x^3 + 4}{5 - x} = ax + b \Leftrightarrow x^3 + 4 = 5ax - ax^2 + 5b - bx$				{M1}
	$\Leftrightarrow x^3 + ax^2 + b - 5a x + 4 - 5b \equiv x^3 - x^2 + 8x - 11$				{M1}
	$\Leftrightarrow a = -1 \quad b = 3$				{A1}
	$y = 3 - x$ drawn				{M1}
	$x = 1.3/1.4$				{A1} [5]
Total 9 marks					

Part	Marks	Notes
(a)	<b>First B1</b>	1 point correct
	<b>Second B1</b>	For all 3 points correct
(b)	<b>B1ft</b>	For points plotted within half a square ft their points
	<b>B1ft</b>	For points joined with a smooth curve ft their table
(c)	<b>M1</b>	For correctly rearranging the given equation to give $x^3 + 4 = x^2 - 8x + 15$
	<b>M1</b>	For factorising their quadratic, minimum attempt, see general guidance.
	<b>A1</b>	For $\frac{x^3 + 4}{5-x} = 3-x$
	<b>M1</b>	For $y = 3-x$ drawn
	<b>A1</b>	$x = 1.3/1.4$
	<b>ALT</b>	
ALT	<b>M1</b>	For $\frac{x^3 + 4}{5-x} = ax + b$ and an attempt to multiply both sides by $(5-x)$ , allow two errors only (sign or algebraic).
	<b>M1</b>	For correctly stating $x^3 + ax^2 + b - 5a x + 4 - 5b \equiv x^3 - x^2 + 8x - 11$
	<b>A1</b>	For $a = -1 \quad b = 3$
	<b>M1</b>	For $y = 3-x$ drawn
	<b>A1</b>	$x = 1.3/1.4$

