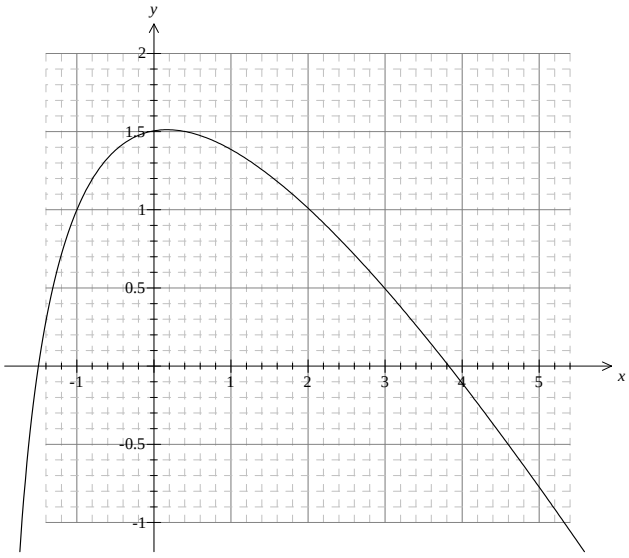
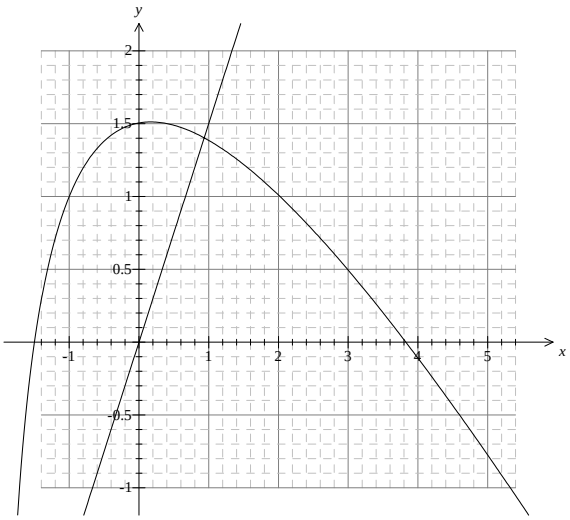
Question Number	Scheme	Marks
7.	(a) x: -1, 0, 1, 2, 3, 4, 5 y: 1, 1.51, 1.39, **1.01**, **0.49**, **- 0.11**, - 0.77	B1 B1
	(b) 	B1ft plot B1ft curve
	(c) $5\log(x+2)-x=\frac{3}{4}$ Reading from graph where $y=\frac{3}{4}$ gives $x=2.5$ to 1dp	M1 A1
	(d) $x+2=10^{\frac{1}{2}x}$ $\log(x+2)=\frac{1}{2}x$ $5\log(x+2)-x=1\frac{1}{2}x$ from graph, $x=0.9$ to 1dp	M1 A1 M1dep A1 (10)
		

Notes for Question 7

Deduct once only for failure to round as instructed.

(a)

Missing values: 1.01, 0.49, -0.11

B1 Any 2 correct B1 third correct. Should be 2 dp - deduct one mark gained if any are correct but not rounded (ie would round to the correct answer). Truncated answers are wrong.

(b)

B1ft for plotting **their** values

B1ft for a smooth curve through **all** their plotted points. Ignore any graph to left of $x = -1$ or to the right of 5 as these are outside the given domain

(c)

M1 for making the given equation match the curve equation. (May not be $\frac{3}{4}$ on RHS.)

A1cso for $x = 2.5$ Ignore any answers outside $-1 \leqslant x \leqslant 5$ Must be 1 dp unless already penalised for incorrect rounding in (a). Check their answer agrees with their graph before giving A1.

(d)

M1 for making the given equation match the curve equation. (May not be $\frac{3}{2}x$ on RHS but must be $5\log(x+2) - x$ on LHS)

A1 for $5\log(x+2) - x = \frac{3}{2}x$

M1dep for drawing the line $y =$ **their** rhs on their graph.

A1cso for $x = 0.9$ Must have been obtained by drawing the correct line which must pass through the origin. Must be 1 dp unless rounding already penalised.

NB Because of the graph some candidates are labelling (c) as (b) and (d) as (c). Do not penalise this.