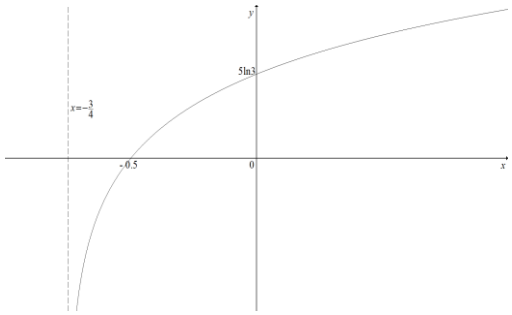
Question	Answer	Marks	Guidance
6	$2x^2 + x - 10 = 5$ leading to $2x^2 + x - 15 = 0$ with a valid attempt to solve to obtain 2 values for x	**M1**	
	$x = \frac{5}{2},\ \ -3$	**A1**	For both Mark final answer for this equation, **A0** if – 3 is rejected
	$2x^2 + x - 10 = -5$ leading to $2x^2 + x - 5 = 0$	**M1**	Must be a correct 3-term quadratic equated to zero
	$x = \frac{-1 \pm \sqrt{41}}{4}$ oe	**2**	**Dep M1** for a valid method of solution to obtain 2 values for x. Mark final answer for this equation, **A0** if negative root is rejected Denominator of final answer must be positive
7(a)	Grad $AB = \frac{6}{8}$ oe Grad $AC = -\frac{2}{14}$ oe Grad $BC = -\frac{8}{6}$ oe	**2**	**B1** for 2 correct unsimplified
7(b)	Centre $(5,\ 3)$	**B1**	**FT** on *their* diameter, allow for $(2,\ 7)$ or $(9,\ 6)$
	Radius^2 = 50 oe soi	**2**	**M1** for use of *their* centre and coordinates of either A, B or C to find the square of the radius or the radius. Centre must not be A, B or C. or Finding the length between any 2 points A, B or C **and** halving it.
	$(x-5)^2 + (y-3)^2 = 50$ oe	**A1**	Allow $\left(5\sqrt{2}\right)^2$ for radius^2

Question	Answer	Marks	Guidance
8		**4**	**B1** for correct shape in first three quadrants tending towards a vertical asymptote in the second and third quadrants. **Dep B1** for curve passing through $x = -0.5$ oe on the x-axis , or stated and no other points on the x-axis **Dep B1** for curve passing through $y = 5\ln 3$ oe on the y-axis , or stated and no other points on the y-axis **B1** for $x = -\frac{3}{4}$ oe shown on graph or stated as the equation of the asymptote. May be implied by a dotted or straight vertical line through $x = -\frac{3}{4}$. This is not a dependent mark.

© Cambridge University Press & Assessment 2025