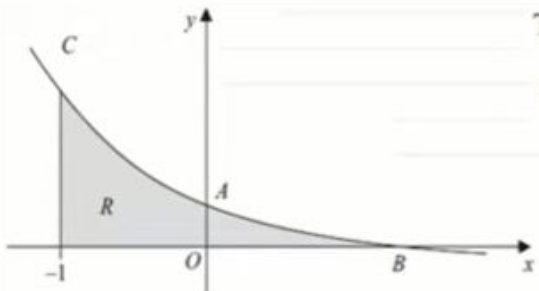




Air maths tuition

Interact, engage and perform

Parametric Equations | Past Paper Question | C4 Edexcel January 2013 Q5(a)(b)



The figure shows a sketch of part of the curve C with parametric equations $x = 1 - \frac{1}{2}t$, $y = 2^t - 1$. The curve crosses the y -axis at the point A and crosses the x -axis at the point B .

(a) Show that A has coordinates $(0, 3)$. (b) Find the x coordinate of the point B .

a) At A : $x=0$ $\therefore 1 - \frac{1}{2}t = 0$ $\therefore \frac{1}{2}t = 1$ $\therefore t = 2$	when $t=2$ $\therefore y = 2^2 - 1$ $= 3$ $\therefore A(0, 3)$	b) At B : $y=0$ $\therefore 2^t - 1 = 0$ $\therefore 2^t = 1$ $\therefore t = 0$	when $t=0$ $\therefore x = 1$ $\therefore B(1, 0)$
---	---	---	--

With the acknowledgement of [Exam Solutions](#).
Find lots more revision sheets on [Air Maths Tuition](#).
[This Video](#)



Exam Solutions
m a t h s m a d e e a s y