

### A - Level Maths 15 Minute Boost 3

What symbol is used to represent the rational numbers?	
What is the discriminant for the quadratic $ax^2 + bx + c$ ?	
$\sqrt{ab} =$	
How do you find the distance between $A(x_A, y_A)$ and $B(x_B, y_B)$ ?	
When is a sequence $x_n$ decreasing?	
<b>1)</b> Find the cartesian form of the equation with parametric form $x = 2 + 3 \cos(\theta)$ and $y = 1 + \sin(\theta)$	



**2 a)** Find  $\int x^{-2} \ln(x) \, dx$

**b)** Hence, find the area of the region bounded by the function  $f(x) = x^{-2} \ln(x)$ , the  $x$ -axis and the lines  $x = 1$  and  $x = 3$ .

