Name: …… **Date: ……**

Logarithmic & Exponential Function _IB Exam Style Questions

1. [Maximum Marks: 6] **GDC**

Let $f(x) = ln(x-1)\,, x > 1\ and\ g(x) = e^{3-x}\,, x > 0$

(a) Write down the x-intercept of the graph of f. [1 mark]

(b) i) Write down f(1.001). [1 mark]
ii) Write down g(2). [2 marks]

(c) Find the coordinates of the point of intersection of the graphs of f and g. [2 marks]

2. [Maximum Marks: 6] **No_GDC**

Solve for x where $9^{x+2} = 27^{3x-1}$

3. [Maximum Marks: 6] **No_GDC**

Solve: $x^y = 3x - 4$

$\log_x 8 = y$