**C1 Chapter 4: INEQUALITIES (AS MATHS)**

**Name: ………………………………..**

**Score:** $\frac{}{37}$ **Percentage: Grade: Target grade:**

1. Solve these inequalities
2. $3(x-5)\leq 24$ [2]
3. $5x^{2}-2>78$ [3]

[January 2007 Q3]

1. Solve these inequalities
2. $1<4x-9<5$ [3]
3. $y^{2}\geq 4y+5$ [5]

[June 2006 Q5]

1. Solve these inequalities
2. $8<3x-2<11$ [3]
3. $y^{2}+2y\geq 0$ [4]

[June 2008 Q7]

4.

1. Solve the equation $x^{2}+10x+8=0$ giving your answers in simplified surd form. [3]
2. Sketch the curve $y=x^{2}+8x+10$, giving the co-ordinates of the point where the curve crosses the *y*-axis. [3]
3. Solve the inequality $x^{2}+8x+10\geq 0$ [2]

[January 2008 Q6]

5.

1. Express $x^{2}+8x+15$ in the form $(x+a)^{2}-b$. [3]
2. Hence state the co-ordinates of the vertex of the curve $y=x^{2}+8x+15$. [2]
3. Solve the inequality $x^{2}+8x+15>0$ [4]

[June 2007 Q8]

**The topics that I need to study further are …**