Full Name : …….. **Date: ……**

Short Assessment 3

Time Allowed: 15 minutes **Total Marks: 15**

1. Solve the following inequalities:

(a) $x^2 + 2x - 15 < 0$

(b) $2x^2 - x - 10 \geq 0$

(6 marks)

2. Find the common range of values of x which satisfy both of the following inequalities:

$$x^2 - 6x - 16 > 0$$

$$4(x - 5) < x + 10$$

(5 marks)

Question 3 is on the next page.

3. Sketch the graph $y = x^2 + 6x + 10$, clearly showing the coordinates of any points where it crosses the axes and the coordinates of the turning points.

(4 marks)

- End of Test -