2 $$f(x) = 7 + 4x - x^2$$

(a) Write f(x) in the form $a - b(x + c)^2$ where a, b and c are integers to be found.

(3)

(b) Hence, or otherwise, find

   (i) the maximum value of f(x)

   (ii) the value of x for which this maximum occurs.

(2)

Question 2 continued

(Total for Question 2 is 5 marks)