5 $f(x) = 2x^2 + 7x - 4$

Given that $f(x)$ can be written in the form $A(x + B)^2 + C$

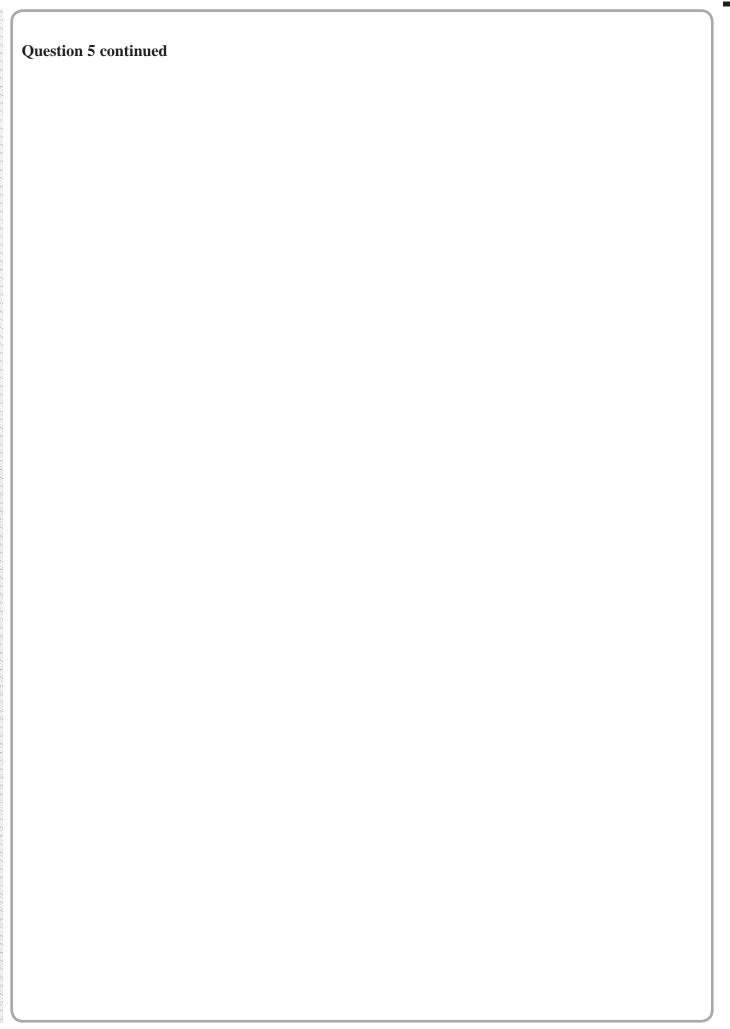(a) find the value of A, the value of B and the value of C.

(3)

(b) Write down

  (i) the minimum value of $f(x)$,

  (ii) the value of x at which this minimum occurs.

(2)

The equation $f(x) = px - 6$ has unequal real roots.

(c) Find the set of possible values of p.

(5)

Question 5 continued

Question 5 continued

Question 5 continued

(Total for Question 5 is 10 marks)

P 5 5 8 8 7 A 0 1 7 3 6