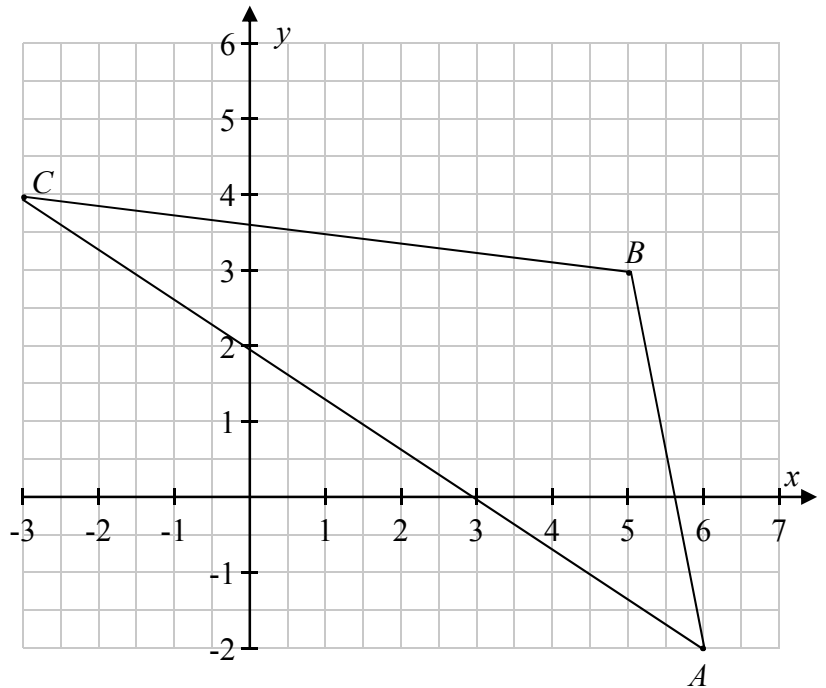
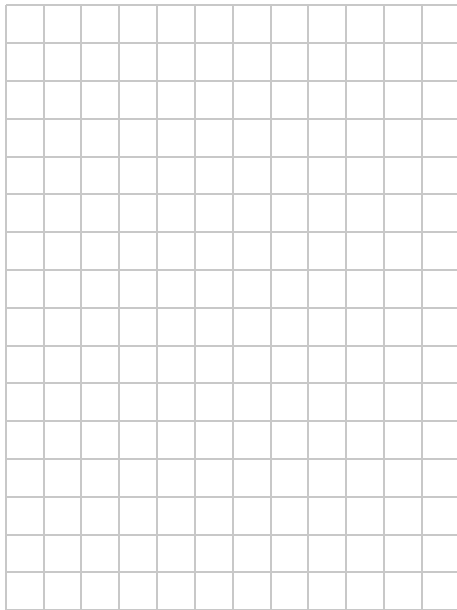


**Question 1**

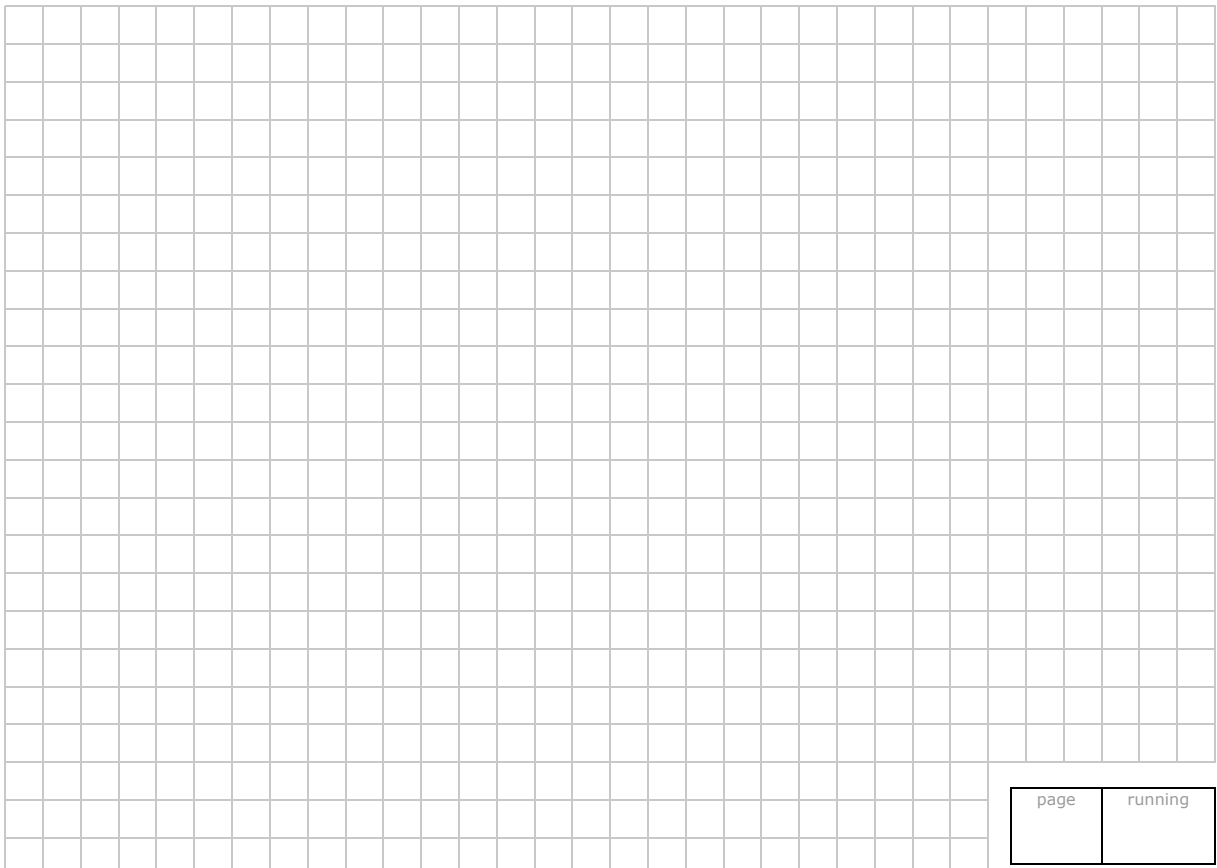
**(25 marks)**

The points  $A(6, -2)$ ,  $B(5, 3)$  and  $C(-3, 4)$  are shown on the diagram.

- (a) Find the equation of the line through  $B$  which is perpendicular to  $AC$ .



- (b) Use your answer to part (a) above to find the co-ordinates of the orthocentre of the triangle  $ABC$ .



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