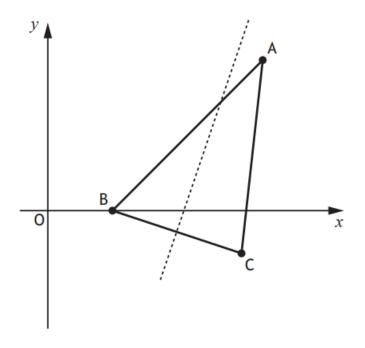
Higher Maths SQA 2017 Paper 2 Question 1



Triangle ABC is shown in the diagram below.

The coordinates of B are (3,0) and the coordinates of C are (9,-2).

The broken line is the perpendicular bisector of BC.



(a) Find the equation of the perpendicular bisector of BC.

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(b) The line AB makes an angle of 45° with the positive direction of the x-axis. Find the equation of AB.

2

(c) Find the coordinates of the point of intersection of AB and the perpendicular bisector of BC.

2

Answers:

(a)
$$y = 3x - 19$$

(b)
$$y = x - 3$$

(c) (8,5)