

6. (a) Solve, for $-180^\circ \leq \theta \leq 180^\circ$, the equation

$$5 \sin 2\theta = 9 \tan \theta$$

giving your answers, where necessary, to one decimal place.

[Solutions based entirely on graphical or numerical methods are not acceptable.]

(6)

- (b) Deduce the smallest positive solution to the equation

$$5 \sin(2x - 50^\circ) = 9 \tan(x - 25^\circ)$$

(2)



Question 6 continued

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Lined writing area for the answer to Question 6.



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Question 6 continued

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Question 6 continued

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A series of horizontal lines for writing answers.

(Total for Question 6 is 8 marks)

